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ABSTRACT

This first annual report details North Carolina's performance and progress in five areas of its First in America goals: high student performance (every student in school and making strong progress, every graduate ready for college and work, and every school accountable for student learning); every child ready to learn (every child with access to quality child care, every parent a good first teacher, and every child ready to begin school); safe, orderly, and caring schools (every school free of drugs, weapons, and disruption; every school with adequate facilities and materials; every student known and cared for; and every family welcomed); quality teachers and administrators (every teacher competent, caring, and qualified; every principal a leader; and every school a good place to work and learn); and strong family, business, and community support (every family involved in their child's learning, every community involved in education, and every child with access to quality health care). The report also looks at financing North Carolina's schools and making North Carolina schools first in America by 2010. Two appendices present a computation of First in America grades and the First in America survey methodology. (SM)

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ED 465 004

"... IF NORTH CAROLINA CAN LEAD THE NATION IN EDUCATION PROGRESS, ... WE CAN LEAD THE NATION IN EDUCATION — PERIOD."

GOVERNOR JAMES B. HUNT JR., STATE OF THE STATE ADDRESS, FEBRUARY 1, 1999

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NC SCHOOLS FIRST IN AMERICA 2010

A Goal for North Carolina's Schools

2000 PROGRESS REPORT

UD 035 052

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First in America 2000 Progress Report

NORTH CAROLINA EDUCATION RESEARCH COUNCIL
December 2000

Charles L. Thompson
and
Elizabeth Kolb Cunningham
Editors

December 6, 2000

Dear Friends:

In the last seven years, North Carolina has made more progress in its public schools than any other state in America. More children are coming to school healthy and ready to learn. Teachers are being paid more, and there are more good teachers than ever before. Schools are safe and more accountable. Test scores are way up.

All of this progress makes us proud of what North Carolina has accomplished. But it also makes us believe the state can do even better. We all believe that, if North Carolina can lead the nation in education progress, we can lead the nation in education, period.

As an Education Cabinet we have a set of goals to make North Carolina *First in America* by 2010:

- High Student Performance
- Every Child Ready to Learn
- Safe, Orderly, and Caring Schools
- Quality Teachers and Administrators
- Strong Family, Business, and Community Support.

For every goal, we also set more specific priorities and measurable performance targets.

We charged our Education Research Council to design and issue each year a report on progress toward the goals. This is the first of those annual *Progress Reports*. It shows exactly where the state now stands in relation to the goals. The *Report Card* on the next page sums it up. Even with all of the progress the state has made, our education system is still just above average. To be the best, North Carolina has a long way yet to go.

At the end of the report, we spell out what each of us — the Public Schools, the Community Colleges, the University, and the Independent Colleges and Universities — will do to help North Carolina become *First in America* by 2010. But we cannot do it alone. We need the help of families, businesses, and communities all across the state. We need your help.

If we all pull together, we can make our education system *First in America* by 2010.

For the future of our children, we hope you will join us to make North Carolina education *First in America* by the end of this decade.

Sincerely,

James B. Hunt, Jr.
Governor

Phillip J. Kirk, Jr.
Chairman, State Board of Education

Michael E. Ward
Superintendent, NC Department of Public Instruction

H. Martin Lancaster
President, NC Community College System

Molly Corbett Broad
President, The University of North Ca

A. Hope Williams
President, NC Independent Colleges & Universities

NC SCHOOLS

FIRST IN AMERICA

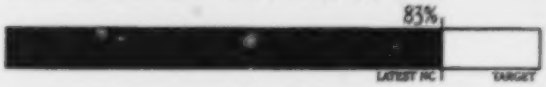
2010

A Goal for North Carolina's Schools 2000 Report Card

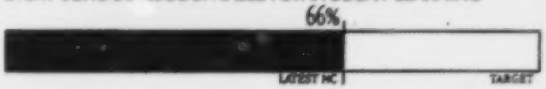
C HIGH STUDENT PERFORMANCE

EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS

EVERY GRADUATE READY FOR COLLEGE AND WORK

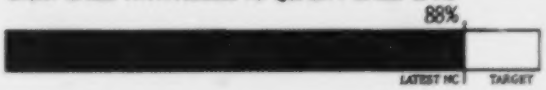


EVERY SCHOOL ACCOUNTABLE FOR STUDENT LEARNING

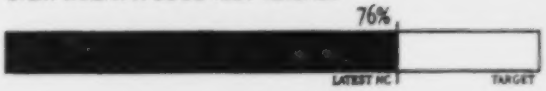


B- EVERY CHILD READY TO LEARN

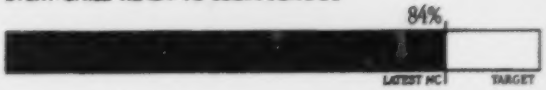
EVERY CHILD WITH ACCESS TO QUALITY CHILD CARE



EVERY PARENT A GOOD FIRST TEACHER

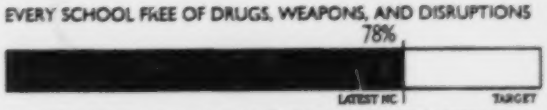


EVERY CHILD READY TO BEGIN SCHOOL

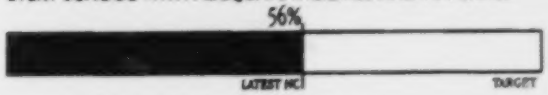


C+ SAFE, ORDERLY, AND CARING SCHOOLS

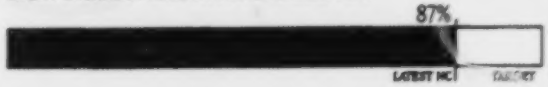
EVERY SCHOOL FREE OF DRUGS, WEAPONS, AND DISRUPTIONS



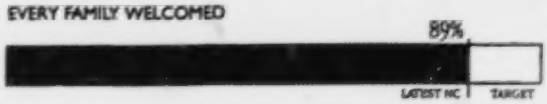
EVERY SCHOOL WITH ADEQUATE FACILITIES AND MATERIALS



EVERY STUDENT KNOWN AND CARED FOR

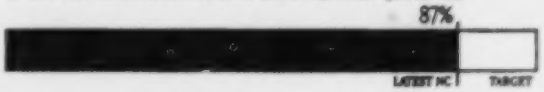


EVERY FAMILY WELCOMED

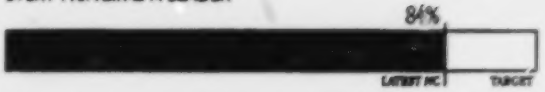


QUALITY TEACHERS AND ADMINISTRATORS B-

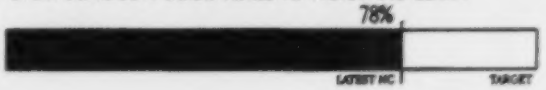
EVERY TEACHER COMPETENT, CARING, AND QUALIFIED



EVERY PRINCIPAL A LEADER

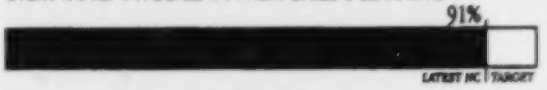


EVERY SCHOOL A GOOD PLACE TO WORK AND LEARN

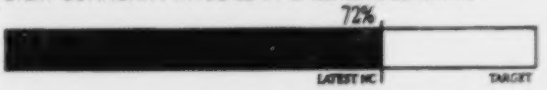


STRONG FAMILY, BUSINESS, AND COMMUNITY SUPPORT B-

EVERY FAMILY INVOLVED IN THEIR CHILD'S LEARNING



EVERY COMMUNITY INVOLVED IN CHILDREN'S LEARNING



EVERY CHILD WITH ACCESS TO QUALITY HEALTH CARE

FOR MORE INFORMATION

Information for the *First in America Reports* is derived from multiple national and state sources. The complete list of *Data Sources and Notes* is available in the *First in America 2000 Progress Report* and on the *First in America* website — http://www.firstinamerica.northcarolina.edu

A copy of the *First in America Reports* may also be requested by phone 919-843-6785, by email fia@ga.unc.edu, or by mail:

North Carolina Education Research Council
Post Office Box 2688
Chapel Hill, North Carolina 27515-2688

LEGEND

Latest NC: This is the average score for North Carolina taken from the most recent data collection available. Most recent data collection dates range from 1990 to 2000.

Target: This is the score North Carolina currently needs to achieve to reach the First in America target.

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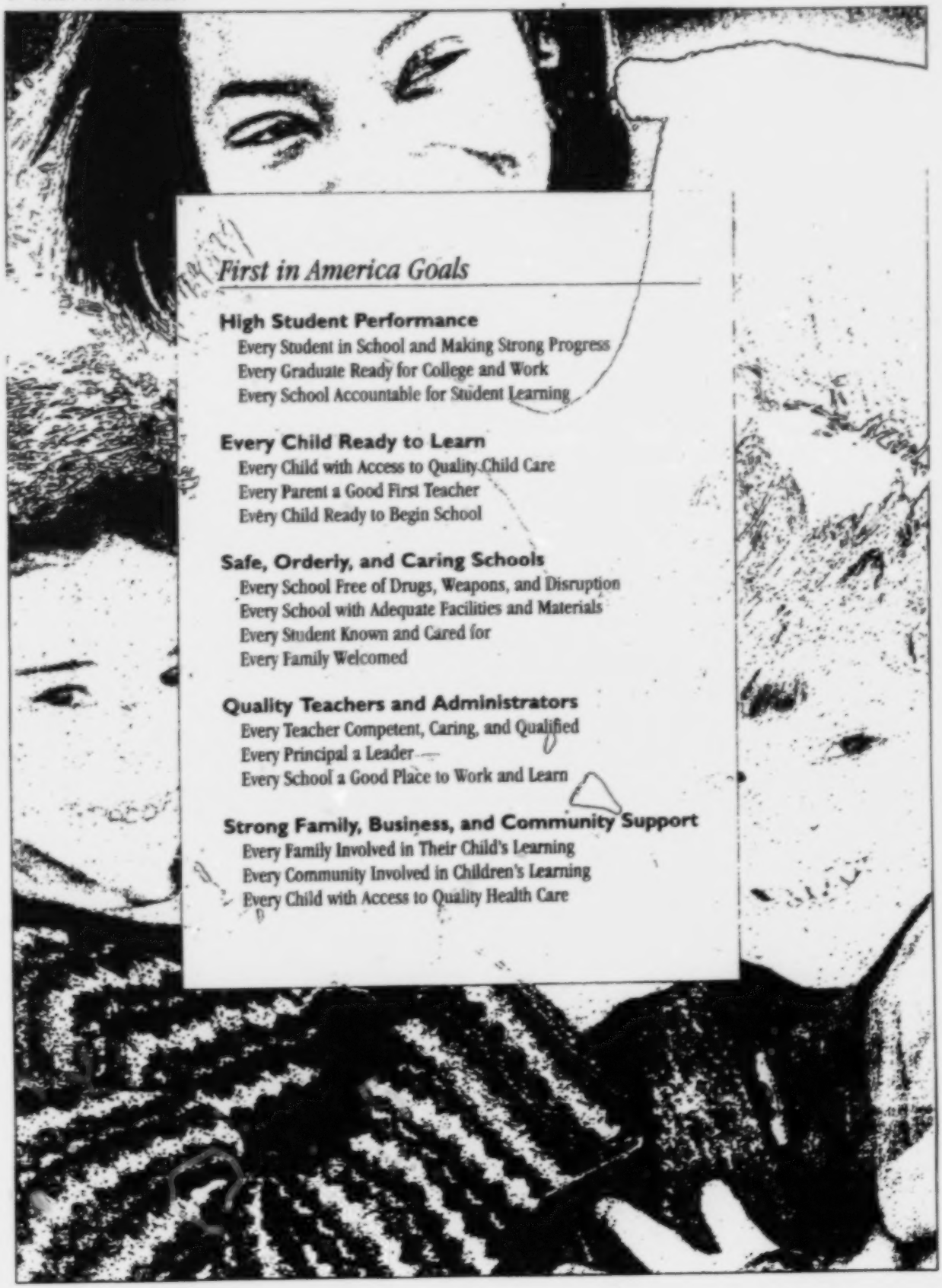

First in America Goals

High Student Performance
- Every Student in School and Making Strong Progress
- Every Graduate Ready for College and Work
- Every School Accountable for Student Learning

Every Child Ready to Learn
- Every Child with Access to Quality Child Care
- Every Parent a Good First Teacher
- Every Child Ready to Begin School

Safe, Orderly, and Caring Schools
- Every School Free of Drugs, Weapons, and Disruption
- Every School with Adequate Facilities and Materials
- Every Student Known and Cared for
- Every Family Welcomed

Quality Teachers and Administrators
- Every Teacher Competent, Caring, and Qualified
- Every Principal a Leader
- Every School a Good Place to Work and Learn

Strong Family, Business, and Community Support
- Every Family Involved in Their Child's Learning
- Every Community Involved in Children's Learning
- Every Child with Access to Quality Health Care

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Introduction

In his 1999 State of the State Address, Governor Jim Hunt issued a challenge. "Let's commit ourselves to this ambitious goal: By the year 2010, North Carolina will build the best system of public schools of any state in America. By the end of the first decade of the 21st century, we will be the first in education."

The Governor was emboldened to issue the challenge by the progress the state had made in education over the previous decade:

- The National Education Goals Panel singled out North Carolina as the state showing the most significant improvement during the 1990s. The state's performance improved on 14 of the Panel's measures — more than any other state.
- Between 1990 and 1996, North Carolina and Texas led all states in combined gains in mathematics and reading achievement on the National Assessment of Educational Progress. Black, Hispanic, and white students all made "significant and sustained gains."
- North Carolina's SAT scores rose considerably — up 45 points.
- Both *Education Week* and the Fordham Foundation ranked North Carolina's system of standards and assessments among the top five in the nation.
- *Education Week* noted that no other state had done more to put meaningful accountability measures in place and to improve teacher quality.
- The state had more National Board Certified Teachers than any other state in the country.
- Smart Start, the Governor's program to improve early childhood care and education, had helped reduce the number of babies born with health problems and increase the number of children with immunizations.
- Since 1993, the rate of school violence had dropped by 21% and the number of guns brought to school, by 68%.
- North Carolina received the *1999 Distinguished Performance Award* from the National Alliance for Business for creating an education and workforce development system "th.. ' ... res that students and workers are ready for the 21st century."

The Governor concluded that ". . . if North Carolina can lead the nation in education progress, we can lead the nation in education, period."

THE *FIRST IN AMERICA* GOALS AND PRIORITIES

Despite all of the progress, making the state's schools *First in America* will be an enormous undertaking, requiring the best efforts of the entire education system. The Governor turned to the Education Cabinet to specify a set of goals to guide the initiative. Formed at the direction of the General Assembly to improve coordination across levels of the education system, the Education Cabinet is convened by the Governor and includes the Chair of the State Board of Education, the Superintendent of Public Instruction, the President of the North Carolina Community College System, the President of The University of North Carolina, and by invitation, the President of the North Carolina Independent Colleges and Universities.

Over the succeeding months, the Education Cabinet developed five major goals, each with a series of more specific priorities (*see page 6*). Education Cabinet members recognized a paradox of public policy: to promote change in practice, you must have continuity in policy. Rapid changes in the direction of policy beget cynicism rather than improvement. If no set of policies lasts long, people adopt the attitude that "this too will pass." Making real change in practice is steady work. Thus, the *First in America* goals and priorities build upon and extend goals set earlier by the State Board of Education, the Governor, and the General Assembly. They also incorporate goals of the state's community colleges, colleges, and universities. In this sense, the initiative extends back over the past decade as well as projecting ahead into the present one.

To help meet the goals, each level of the system — the public schools, the community colleges, the university, and the independent colleges and universities — also developed an action plan. For highlights of each sector's plans, *see Making North Carolina Schools First in America, pages 101-108.*

The goals and priorities are expressed largely in terms of the results that the Education Cabinet wants to achieve and strategies designed to achieve them, not in terms of expenditures or "inputs" to the education system. In other words, the Education Cabinet set the goal of outperforming other states, not just outspending them. Critics of the ini-

tiative have remarked that North Carolina will never be *First in America* while ranking among the lowest on measures of tax effort and expenditure. The Education Cabinet recognizes that more investments will be necessary. The data provided in this annual *Progress Report* should tell policymakers which strategies are working well, which ones need to be changed, and where additional investments are needed most urgently. *(For more on finance issues, see Financing North Carolina's Schools, beginning on page 99.)*

THE *FIRST IN AMERICA* REPORTS

"Just as we use a report card to measure the progress of our children," the Governor went on to say in his State of the State Address, "we need a report card that measures the progress of our state. We need a single sheet of paper that will tell us how we're doing and whether we're on track to be *First in America* by 2010." He directed the North Carolina Education Research Council to design and issue an annual *Progress Report* and *Report Card*. The Research Council coordinates research for the Education Cabinet. While the Cabinet sets tasks for the Council, the Council and its staff have the latitude to conduct research in an independent, objective fashion.

In consultation with the Education Cabinet, Council staff identified a set of "indicators," or measures, that will enable the state to keep track of its progress over the coming decade. The Education Cabinet then approved "targets" for all of the indicators — specific levels of performance that mark just how well the state will have to do to meet the *First in America* goals.

This *Progress Report* explains why each of the indicators is important, shows where the state now stands on each of these measures, and sums up performance across all measures. It will be issued annually for the next decade. A *Report Card* — the "single sheet of paper" the Governor promised in his State of the State Address — is tucked into the pocket at the back of this *Progress Report*. The *Report Card* gives the grades for North Carolina's current performance on each of the goals, as well as bar graphs that show where the state stands in relation to the targets for each priority. Along with it is a four page tabloid-sized *Data Report* that provides a compact view of the data underlying the grades.

Thus, we offer three levels of detail:

- a one-page *Report Card* with a grade on each goal and a bar graph for each priority,
- a *Data Report* with the data on each indicator, and
- this *Progress Report* that presents the grades, bar graphs, and indicator data and goes on to explain them.

CROSS-STATE DATA SOURCES

- U.S. Department of Education
- National Center for Education Statistics
- National Assessment of Educational Progress
- National Education Goals Panel
- National Assessment of Adult Literacy
- National Board for Professional Teaching Standards
- Educational Testing Service
- National Education Association
- American Federation of Teachers
- Centers for Disease Control and Prevention
- College Board
- *Education Week*
- Annie E. Casey Foundation
- Fordham Foundation
- General Accounting Office
- Council of Chief State School Officers

THE DATA AND TARGETS

Because the Governor expressed the education challenge competitively — not just to be good but to be the best among the states — we rely primarily on data from all or many states to track progress. These data come from federal agencies, national foundations, and other reliable, independent sources of information on states' comparative performance *(see box at left)*.

Performance targets — the levels of performance the state will have to reach in order to be *First in America* — are set largely in terms of where North Carolina will stand among the states. A common target is to be in the "top ten" states. When data are available on all fifty other states (we also include the District of Columbia), the target score is the score for the state that is currently number ten. Obviously, other states will not stand still for North Carolina to pass them. So these target scores will change annually. But the targets do provide a sense of what the state is aiming for.

When data are not available on all states, we have interpreted "top ten" proportionately. For example, on one measure data are available for only 43 states. To be in the "top ten" on that indicator, North Carolina would have to be about 7th, not 10th. The target score is set accordingly. This practice sets a tougher standard than would a literal application of the "top ten" criterion.

When preliminary data showed that North Carolina was already doing well, the Education Cabinet set the target higher — to be in the top five, or to be first. For a few indicators, only a national average is available, not data on the other states individually. On these indicators, the current target is to be at or above the national average.

Some have asked, "If the goal is to be *First in America*, why not set all of the targets to be

first?" In designing these reports, Education Cabinet and Research Council staff consulted with many groups, including business leaders, who habitually use data to track performance. The business leaders pointed out that making the last few percentage point gains on a given measure often takes far more effort and resources than it is worth, a principle sometimes referred to as the law of diminishing returns. They urged us to keep our eye on the big picture — the overall performance of the system. If North Carolina can be among the ten best states and often toward the top on many different measures of education performance, that is what counts, they said.

We supplement the national data with some data from within the state, including students' scores on the ABCs assessments administered annually under the auspices of the Public Schools of North Carolina. Within-state data also come from other sources (*see box at right*).

WITHIN-STATE DATA SOURCES

- NC Department of Public Instruction
- NC Department of Health and Human Services
- NC Child Advocacy Institute
- Governor's Mentoring Initiative
- Frank Porter Graham Child Development Center

In a few cases, we could not identify any acceptable existing data for something that it was really important to measure. For example, whether parents feel welcomed by their children's schools and believe their children are known and cared about by teachers and administrators. The only way to find out, we concluded, was to ask them. So to address such questions, we commissioned statewide surveys of representative samples of parents, the public, teachers, and principals. The surveys were conducted by a unit of the Andrew Young Center for Policy Studies at Georgia State University. The Georgia State Applied Research Center has broad experience in survey research, has conducted surveys in states throughout the Southeast, and has established strong credibility for the quality of its work.

With comparative cross-state targets, one can be confident that the target level is high but attainable — some state has already achieved a comparatively high level of performance. So we know the target is both high and attainable. But setting targets for the indicators that use existing within-state data or survey data was more difficult. In general, the Education Cabinet wanted to set "stretch goals" — goals that would stretch the capacities and sharply raise the performance of the system. In nearly all cases, they used "9 out of 10," as in "Nine of 10 parents will say that their child is known and cared about in school." One problem in setting such targets is that it is difficult to know what a stretch goal would be. What level would stretch the system, yet be realistically attainable by 2010? Because these are difficult questions to answer, there may be cases where the Education Cabinet has set the bar a bit too high or too low. But at least there is a clear and measurable goal in each case.

A final important observation about the data is that they are often only approximate, incomplete, or older than we are comfortable in reporting. By "approximate" we mean that the data just point to or indicate in a rough way where the education system stands on some important dimension. For example, take the case of technology. What one would really like to know is what kinds of computers, with what kinds of software and what quality of connections to the Internet students are using, to carry out what kinds of tasks, with what kind of guidance and support from teachers. But data reflecting this sort of fine-grained detail are simply not available, and even if they were, it is hard to imagine just how we might squeeze them into a report spanning so many dimensions of the education system. So we are limited to reporting rough-and-ready indicators of the present performance of the system.

By "incomplete," we mean that some data are available for only a few states, or for the nation as a whole with no state-by-state breakdowns. Comparisons across such limited data are not ideal. By "older" we mean that especially for the "prior year," the data are sometimes several years old. This simply reflects the status of the nation's and the state's data systems. Until recently, data were seldom used to track progress and inform policy. So the expense of gathering, analyzing, and reporting good data did not seem justified. Many education data systems have not yet caught up with the new thinking about accountability and data-based policy making. We hope the *First in America* reports will prompt improvement in data systems as well as in the education system. Meanwhile, we believe we have found and reported the best available data on the *First in America* targets.

THE BAR GRAPHS AND GRADES

As noted above, the Report Card (*see page 4*) includes a grade for the state's current performance on each goal and a bar graph that shows where we stand on each priority. The grades and standing on the bar graphs are computed on the basis of the data and the targets.

For purposes of illustration, consider the very first target and indicator in the report. The target reads, "North Carolina will be one of the top ten states on National Assessment of Educational Progress (NAEP) assessments." The first indicator is the "Percentage of students scoring proficient or higher on NAEP assessments." And the first line of data deals with the percent proficient on the NAEP grade 4 reading assessment. On the most recent assessment for which data were available, 28% of NC fourth graders scored proficient or higher. (As explained later in the report, the standard for "proficient" is quite high.) Data on this measure are available for only 43 states. So to be in the "top ten," by our definition, NC fourth graders would have to score between the 8th and 7th states. The actual score they would have to reach is 34%.

So how close are NC's fourth graders to the target level? They are about 28/34ths or 82% of the way there. We compute this percentage for all of the indicators related to the target — grade 4 math, grade 8 reading, grade 8 writing, grade 8 math, and grade 8 science. Then we take the average of those percentages. As it happens, that is also 82%. So, NC students are performing at a level that is roughly 82% of the target level. In other words, NC is about 82% of the way to the target on this set of indicators.

By extending the same procedure, we compute a percentage that tells us roughly where the state stands in relation to the full set of targets for the priority. In this case, NC is performing at a level that is 74% of the target level for the priority, *Every Student in School and Making Strong Progress*. Some statisticians might raise technical objections to this procedure. The procedure does have its faults. But our technical advisors tell us that it offers a reasonable if rough estimate of how the state is performing on a priority. That is what we need for purposes of the *Report Card* — a way to give North Carolinians a good sense of how the state is performing measured against the *First in America* targets. *(For further information about the grading process, see Technical Appendix A: Computation of the First in America grades, page 117.)*

FIRST IN AMERICA GRADING SCALE

100 =	A+
94-99 =	A
90-93 =	A-
88-89 =	B+
84-87 =	B
80-83 =	B-
78-79 =	C+
74-77 =	C
70-73 =	C-
68-69 =	D+
64-67 =	D
60-63 =	D-
below 60 =	F

To assign grades based on the performance levels represented in the bar graphs, we used the scale at the left.

To earn an A+, the state would have to perform at 100% of the targets for a goal. We believed that no lower standard would be acceptable. In other respects, this grading scale is commonly used in universities and some public schools. Research Council staff settled upon the scale before we knew how North Carolina would score on any of the five *First in America* goals. No member of the Cabinet has suggested that the scale should be lowered. Others might prefer a different scale. The data are available for anyone who would like to set a different scale and derive different grades. At a minimum, our process for deriving goals is objective and replicable, not a matter of subjective judgment. The grades are computed, not made up "by guess and by golly."

SO WHERE DO WE STAND?

North Carolina now rates three B-minuses, a C+, and a C. Put simply, the state's educational system is now performing a little better than average. But only a little.

Despite the progress noted above, North Carolina's education system still rates only a C for the goal of *High Student Performance*. On many measures, the state is doing well. But pulling down the average for this goal is performance on two specific indicators where the Education Cabinet has set especially aggressive targets. The first is, "NC will eliminate the minority achievement gap." Among the many important targets of the *First in America* initiative, eliminating the gap between achievement levels for minority students and the white majority may be the most crucial to North Carolina's chances of becoming first in education. This indicator will be closely watched, and all levels of the education system from pre-kindergarten through university are likely to intensify their efforts to reach the target: a zero gap in proficiency.

The second target where performance is lagging is, "Nine of 10 NC schools will be Schools of Excellence or Schools of Distinction." Schools of Excellence and Schools of Distinction represent the two highest levels of performance in the state's ABCs of Public Education accountability system. To reach these levels, a school must not just show good progress, but must have the great majority of its students (80 or 90%) scoring at or above grade level on state tests. If a very large proportion of schools were to reach these levels, the public might wonder whether the bar

is set high enough to warrant the label of "Excellence" or "Distinction," and the State Board of Education might well consider raising the bar. So a "nine out of ten" target for this indicator may go beyond a "stretch goal" to a goal that is virtually impossible to reach. The target may be a useful way to express determination to raise student performance, but may not be realistically attainable.

Turning to the goal of getting *Every Child Ready to Learn*, the state now earns a B-. As we shall later show in more detail, parents and the early childhood education community are doing a solid job of getting most children ready for school. The condition of North Carolina's children when they enter school is comparable to the condition of children nationwide. But improvements are still sorely needed in some areas.

On the goal of *Safe, Orderly, and Caring Schools*, the state now earns a C+. The great majority of NC parents seem to believe that teachers do know and care about their children as individuals. They also feel welcomed in their children's schools. But according to our measures, the state and its communities are failing to provide the schools with adequate facilities, equipment, and materials. This is the only priority in the entire *Progress Report* where the data indicate clear failure. Given the strong and apparently effective accountability pressure the state is placing on our schools, principals, and teachers, it seems only fair to assure that they have what they need to do their jobs well. According to our data, that is not the case.

As indicated earlier, in recent years North Carolina has taken strong steps to assure that our students have high quality teachers. The effort shows. As measured against the *First in America* standards, the state's efforts to assure that all children and all schools have *Quality Teachers and Administrators* now rate a B-. Improvements are still needed in the quality and focus of the professional development afforded teachers and in the percentage of teachers with master's degrees. The working environment for teachers and administrators also needs upgrading. And despite the substantial increase in salaries for teachers over the past several years, a large majority remain dissatisfied with their compensation. In a time of worsening teacher shortages, this dissatisfaction must be taken seriously.

Finally, North Carolina's students do enjoy *Strong Family, Business, and Community Support*. The state now earns a B- for this goal. The business community has been appropriately lauded for its contributions to the improvement of education in North Carolina. Over 40,000 North Carolinians are now serving as mentors to support students' learning. But there is more that employers can do to support such involvement. For North Carolina's children and young people to reach a level of achievement that is genuinely *First in America*, still stronger support from families, businesses, and communities will be required.

This report offers considerable detail on the targets, indicators, bar graphs, and grades for the five *First in America* goals. While the grades and bar graphs do offer a good sense of the state's current level of performance, the actual picture is much more complicated. The state is doing quite well in several areas and shockingly poorly in at least one.

Considering the progress that the state has made over the past decade, it would be surprising if North Carolina got lower overall marks. And considering that the report measures the state's educational performance against the standard of *First in America*, it would be surprising if the state got higher marks.

Thus, the system that the Education Cabinet and Research Council have devised for measuring the state's educational performance and progress seems to be a reasonable one. It is not perfect. The targets were set through a process of informed judgment. The data are approximate, sometimes incomplete, and sometimes old. And the procedures for computing values for the bar graphs and grades yield only rough estimates. The grading system, like the educational system, can and will be improved over the coming decade as better data become available and critics offer better ways to think about the data.

HOW TO READ THE DATA

Before turning to an examination of NC's performance on each goal, we want to offer a few notes on how to read the data. For purposes of illustration, consider the following excerpt from the *High Student Performance* data.

HIGH STUDENT PERFORMANCE

TARGETS | INDICATORS | SCORES, CHANGE, AND RANK

Changes: ↑ North Carolina's score was significantly better. / ↓ North Carolina's score was significantly worse. / ↔ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK						
• NC will be one of the top 10 states on National Assessments of Educational Progress (NAEP) assessments.	Percentage of students scoring proficient or higher on NAEP assessments	GRADE 4 READING:						
		LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	BEST
		28%	30%	↔	Tied for 22nd	31%	34%	46% (CT)

High Student Performance is the **Goal**, and the first **Priority** is, *Every Student in School and Making Strong Progress*. The first **Target** within the priority is, "NC will be one of the top 10 states on National Assessment of Educational Progress (NAEP) assessments." The data we will use to judge whether the state's students are in the top ten — what we call an **Indicator** — is the "Percentage of students scoring proficient or higher on NAEP assessments."

The **Latest NC Score** is the number of students scoring proficient or higher in the most recent year for which data are available. In this case, that was 1998. The **Prior NC Score** is from 1994. To find out exactly what year each piece of data came from, see the *Data Sources and Notes* at the end of the section about each goal in this report. Sometimes "score" is not quite the right word — for example, when we are reporting the percentage of 2-year old children with immunizations. But for simplicity, we use it throughout.

The **Change** arrows tell whether the score got better, worse, or did not change from the Prior Score to the Latest Score. An arrow pointing up *always* means that the score is getting better. On some measures, a lower percentage is better. For example, the percentage of infants at risk for poor health has declined. That is better. So the arrow points up. When there has been no change from the Prior to the Latest Score, we use a double-headed or "sideways" arrow. Sometimes we use a sideways arrow even though the Latest and Prior Scores are different. This happens in cases where the data come from samples and the difference is smaller than the margin of error. So the change is not statistically significant. In other words, the difference could just reflect chance variation between the samples drawn in the Latest and Prior years rather than a true difference in the populations one wants to know about.

The **NC Rank** shows where North Carolina ranks among the states for which data are available. As noted above, sometimes we have data for only half of the states, or even fewer. To find out exactly how many states are being counted for a given indicator, see the *Data Sources and Notes* at the end of each section.

The **US Average** is the average score for the nation as a whole or for those states about which we have data. In cases where we have data for only a few states, the term may be misleading. But the data are easier to read if we keep the headings as consistent as possible, and if fewer than 51 states participate, the actual number of states is always cited in the *Data Sources and Notes*.

The **Target Score** is the score we are aiming for. It is dictated by the **Target**. In this case, the target is to be in the "top ten" states. But data are available for only 43 states. Proportionally, that means that to get into the top ten, NC would have to score between the 7th and the 8th states in the current ranking. Specifically, 34% of NC's 4th graders would have to be proficient on the NAEP assessment. **First** — the top scoring state on this indicator — is Connecticut. Forty six percent (46%) of Connecticut's 4th graders score proficient or higher in reading.

Which brings us to the question, who's *First in America* right now? One way to answer the question is to add up the number of times each state appears in top ten rankings on the *First in America* indicators. By that measure, Connecticut and Massachusetts would rank number one and number two. Minnesota, North Dakota, and Utah are tied for number three. We look forward to the day when North Carolina will rank with or ahead of those five states.

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High Student Performance

C

What students know and can do when they graduate from high school is widely regarded as the ultimate test of our schools. Certainly it is what matters to most employers, colleges and universities, and members of the public. Thus, the data in this section include several measures of just how ready our schools' graduates are for college and/or work.

But it is also important to know whether the state's children are staying in school and making steady progress while they are there. If many students are dropping out, neither the state's workforce nor its citizenry can be considered well-educated, even if those who do graduate are splendidly prepared. Nor would it be acceptable for some groups of students to founder or fall behind, even if the average student is progressing well. So here we also include data on school dropout and completion rates, and on how well students from different ethnic backgrounds, students with disabilities, and students near the top of their classes are doing.

The section concludes with data on how well the state is discharging its responsibility to hold schools accountable, and how well schools are doing by the standards the state has set.

Overall, North Carolina earned a C in this area. If we assigned grades for the priorities within this goal, a C (74%) would be awarded for *Every Student in School and Making Strong Progress*, a B- (83%) would be awarded for *Every Graduate Ready for College and Work*, but a D (66%) would be assigned to *Every School Accountable for Student Learning*. The fact that only a relatively small percentage of schools in North Carolina have earned the designation of School of Excellence or School of Distinction kept the grade low. In part, the overall rating also reflects the gap in achievement between white students and students from other ethnic and racial backgrounds. Progress on many of the measures in this goal area has been made, but not enough. Much more needs to be done if North Carolina is to become first in the nation on these ratings of high student performance.

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HIGH STUDENT PERFORMANCE

TARGETS | INDICATORS | SCORES, CHANGE, AND RANK

Changes: ↑ North Carolina's score was significantly better. / ↓ North Carolina's score was significantly worse. / ↔ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK
• NC will be one of the top 10 states on National Assessment of Educational Progress (NAEP) assessments.	Percentage of students scoring proficient or higher on NAEP assessments	GRADE 4 READING: Latest NC Score: 28% · Prior NC Score: 30% · Change: ↔ · NC Rank: Tied for 22nd · U.S. Average: 31% · Target Score: 34% · First: 46% (CT) GRADE 4 MATH: Latest NC Score: 21% · Prior NC Score: 13% · Change: ↑ · NC Rank: Tied for 18th · U.S. Average: 21% · Target Score: 24% · First: 51% (CT) GRADE 8 READING: Latest NC Score: 31% · Prior NC Score: N/A · Change: N/A · NC Rank: Tied for 12th · U.S. Average: 31% · Target Score: 34% · First: 42% (CT,ME) GRADE 8 WRITING: Latest NC Score: 27% · Prior NC Score: N/A · Change: N/A · NC Rank: Tied for 6th · U.S. Average: 27% · Target Score: 27% · First: 44% (CT) GRADE 8 MATH: Latest NC Score: 20% · Prior NC Score: 12% · Change: ↑ · NC Rank: Tied for 24th · U.S. Average: 24% · Target Score: 31% · First: 34% (MN) GRADE 8 SCIENCE: Latest NC Score: 24% · Prior NC Score: N/A · Change: N/A · NC Rank: 24th · U.S. Average: 29% · Target Score: 36% · First: 41% (ME,MT,ND)
• Nine out of 10 NC students will score at or above grade level on End-of-Grade (EOG) and End-of-Course (EOC) examinations.	Percentage of students scoring at or above grade level on NC's EOG and EOC examinations	NC EOG: % OF STUDENTS IN GRADES 3–8 SCORING AT OR ABOVE LEVEL III / CHANGE (PRIOR NC SCORE IN PARENTHESES) Reading: 75% (75%) ↔ · Mathematics: 80% (79%) ↑ · Both: 70% (69%) ↑ NC EOC: % SCORING AT OR ABOVE LEVEL III / CHANGE (PRIOR NC SCORE IN PARENTHESES) Algebra I: 69% (65%) ↑ · Algebra II: 63% (59%) ↑ · Geometry: 60% (58%) ↑ · Physical Science: 57% (56%) ↑ · Biology: 58% (58%) ↔ Chemistry: 62% (60%) ↑ · Physics: 73% (72%) ↑ · ELPS: 67% (67%) ↔ · English I: 68% (65%) ↑ · US History: 47% (51%) ↓
• NC will eliminate the minority achievement gap.	Gap in percent proficient on NAEP and percent at or above grade level on NC EOG and EOC examinations	Black/White Gap · Hispanic/White Gap · American Indian/White Gap (in percentage points) NAEP: 28 · 24 · 21 EOG & EOC: 27 · 18 · 14
• NC will be 1st in the nation in the percentage of students taking advanced courses.	Percentage of students taking advanced courses in math and science	% OF 8TH GRADERS TAKING ALGEBRA: Latest NC Score: 27% · Prior NC Score: 30% · Change: ↓ · NC Rank: Tied for 4th · U.S. Average: 18% · Target Score: 54% · First: 54% (UT) % OF HIGH SCHOOL STUDENTS TAKING UPPER LEVEL MATH COURSES: Latest NC Score: 59% · Prior NC Score: 59% · Change: ↔ · NC Rank: Tied for 2nd · U.S. Average: 45% · Target Score: 61% · First: 61% (NE) % OF HIGH SCHOOL STUDENTS TAKING UPPER LEVEL SCIENCE COURSES: Latest NC Score: 31% · Prior NC Score: 30% · Change: ↑ · NC Rank: Tied for 10th · U.S. Average: 26% · Target Score: 41% · First: 41% (MS)
• 95 percent of NC's students will finish high school.	Percentage of students completing high school or GED	Latest NC Score: 85% · Prior NC Score: 87% · Change: ↔ · NC Rank: Tied for 36th · U.S. Average: 85% · Target Score: 95% · First: 95% (MD,ND)
• NC will be one of the top 10 states in program completion rates for exceptional students.	Percentage of exceptional students age 14 or older who successfully complete their special education program	Latest NC Score: 48% · Prior NC Score: 48% · Change: ↔ · NC Rank: Tied for 17th · U.S. Average: 46% · Target Score: 53% · First: 84% (TX)
• NC will be among the 10 states with the lowest high school dropout rate.	Percentage of teens age 16 to 19 who are high school dropouts *	Latest NC Score: 12% · Prior NC Score: 12% · Change: ↔ · NC Rank: Tied for 41st · U.S. Average: 10% · Target Score: 7% · First: 4% (WY)

LEGEND

* *On this indicator a lower score is better, a higher score is worse.*

Latest NC Score: *This is the average score for North Carolina taken from the most recent data collection available. Most recent data collection dates range from 1990 to 2000.*

Prior NC Score: *This is the average score for North Carolina taken from the preceding data collection.*

Change: *Change arrows show North Carolina's progress from the last data collection to the most recent data collection.*

- ↑ *North Carolina's score is significantly better.*
- ↓ *North Carolina's score is significantly worse.*
- ↔ *Interpret North Carolina's score with caution — change is not significant.*

NC Rank: *North Carolina's rank among states for which data are available. States are ranked from best to worst.*

U.S. Average: *This is the average score for the United States taken from the most recent data collection available.*

Target Score: *This is the score North Carolina currently needs to achieve to reach the First in America target.*

First: *The score and state abbreviation is listed for the state receiving the best reported score.*

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EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS

Student achievement is usually measured through tests and assessments of what students have learned. While not everything that is taught and learned is tested, tests allow us to "take the pulse" of education and then compare the outcomes to the performance of other students within the state or across the nation. In this section, we report outcomes on a number of assessments, both national and based in North Carolina. Overall, we are 74% of the way toward achieving the goal in this area. If we thought about this as a letter grade, North Carolina would earn a C. While scores on many assessments are going up, we are still short of the goal of being among the top ten states on most of these measures. In part, this is related to the achievement gap between the scores of white students and students of other racial and ethnic groups. Yet it appears that, with effort, many of the targets in this area can be achieved within the next 10 years.

NC will be one of the top 10 states on National Assessment of Educational Progress (NAEP) assessments.

PERCENTAGE OF STUDENTS SCORING PROFICIENT OR HIGHER ON NAEP EXAMINATIONS

The National Assessment of Educational Progress (NAEP) collects information about the performance of American students in reading, writing, mathematics, science, social studies and cultural arts. Every two years, NAEP assesses students in grades 4, 8, and 12 in these areas, although not every grade is tested in every subject each year. A sample of students from across the nation is tested, and their results are used to construct a picture of national performance. Since 1990, individual states have been able to participate in state assessments of 4th and 8th graders in reading, writing, mathematics, and science. A separate sample of students, which reflects the population of the entire state, is selected for these state assessments. The number of states participating in these assessments varies from subject to subject. On average, however, about 43 states have participated.

For each subject area, NAEP convenes panels of researchers, teachers, parents, and citizens to identify the important skills and knowledge that should be learned in each subject for each grade level. The outcomes of these panels' discussions are the basis for the questions used in each test.

The results from the National Assessment are important for several reasons. First, the President and Congress use these results when discussing education attainments and needs in the nation. Second, because NAEP assesses achievement in the nation and in most of the states, the results for our state can be compared with other states and with the nation as a whole. NAEP is the only assessment currently used in North Carolina that allows national comparisons in four subjects and across two grades.

NAEP reports results as the percent of students scoring at the basic, proficient, and advanced levels of achievement. "Basic" represents partial mastery of the essential knowledge and skills necessary for work at each grade level. "Proficient" indicates competence in challenging subject matter, including subject knowledge, application of this knowledge to real world situations, and analytical skills appropriate to this subject matter. "Advanced" represents superior performance.

Because the Education Cabinet wants every child performing at a high level, in this report we concentrate on percentages of students performing at the "proficient" and "advanced" levels, which are combined into a single percentage.

It should be noted, however, that questions about the achievement levels set by NAEP have been raised. Scholars from the National Academy of Sciences, among other groups, found flaws in the current procedures for setting achievement levels. The NAEP Board set the criterion for "proficient" performance higher than seemed reasonable to Academy scholars. Yet most of the groups that studied the problem of setting achievement levels for the assessment accepted the need to continue using the current achievement levels until a better method could be developed. Even if the cut-off scores for the "proficient" level are too high, the bar is set at the same height for students in all the states. Thus, NAEP proficiency levels still offer a sound way to compare performance across states.[1]

Reading

In the 1998 reading assessment, each sampled student in grades 4 and 8 was given two reading passages and was asked to answer multiple choice questions as well as short-answer questions ("constructed response"). The questions incorporated a number of comprehension skills — initial understanding, interpretation, personal reflection, and evaluation. The reading passages included information articles, literature for enjoyment, and directions for performing a task, although no student had all three types of passages. A total of 40 states participated in the 4th grade reading assessment, while 37 states participated in the 8th grade assessment.

In 1998, 28% of North Carolina's 4th grade students scored at the proficient or advanced level. This was down from the 30% registered in 1994, but the change is not statistically significant. This score put North Carolina in a tie for 22nd place in the nation, where the average was 31%. Among the top ten states, the lowest percentage of students scoring at the proficient level was 34%.

Thirty-one percent (31%) of North Carolina's 8th graders scored at the proficient level or above. This puts our 8th graders exactly at the national average in reading, in a three-way tie with Maryland and Utah.

To have placed among the top ten states, North Carolina would have needed an additional 3 percentage points for 8th grade students and an additional 6 percentage points for 4th graders. To reach our target we will probably need to gain even more, since other states will also be working to improve their performance.

Mathematics

The NAEP mathematics assessment presents questions on five math topics: numbers, measurement, geometry, data analysis, and algebra. These same topics are emphasized in the *North Carolina Standard Course of Study*. About half of the testing time is devoted to multiple-choice questions and about half to short-answer problems. Students are allowed to use calculators, rulers, and protractors. In 1996, 44 states participated in the 4th grade math assessment, while 41 states participated in the 8th grade assessment.

Between the 1992 and 1996 assessments, there was a large improvement in the percentage of North Carolina's 4th graders scoring at the proficient level: from 13% to 21%. This put North Carolina in a tie for 18th place among the states participating. The average national score was also 21%. To make it into the top ten states, at least 24% of the state's students would have to score proficient or better.

Similarly, from 1992 to 1996 there was also a large improvement in the percentage of 8th graders receiving proficient scores: from 12% to 20%. The latest national average is 24% and the top ten, or target score, is 31%. Thus, while North Carolina 4th graders scored at the national average in mathematics, our 8th graders are still well below the national average. North Carolina students would need an additional 3 percentage points in 4th grade math and an additional 11 percentage points for 8th grade to be included among the current top ten states. As other states improve their performance, NC may need to improve even more to reach the top ten.

Writing

NAEP assesses three kinds of writing: narrative, informative, and persuasive. Within these kinds of writing, specific skills — elaboration and detail, organization, and mastery of the conventions of written English — are assessed. Each sampled student is given two prompts (writing assignments), drawn from the three kinds of writing, and has 25 minutes to respond to each. The NAEP writing assessment was conducted only in 8th Grade in 1998. Among North Carolina 8th graders, 27% achieved a proficient score, which matched the performance level of the nation as a whole. In all, 36 states participated in the 8th grade writing assessment. As noted earlier, when not all states participated on a given measure, we have reset the top ten bar accordingly — by setting it proportionately higher. Only 36 states participated in the 1998 eighth grade writing assessment. So to make the target for this measure, our eighth graders would have to place no lower than 7th among the participating states. Our eighth graders actually placed sixth. So North Carolina students have reached the *First in America* target for this measure.

Science

The NAEP science assessment asks questions in three branches of science: physical, earth, and life science. The questions focus on conceptual understanding of scientific facts, scientific investigation, practical reasoning, the nature

of science, and the organizing themes of science. Students are asked both multiple choice and constructed response questions. In 1996, students in 47 states participated in the science assessment.

In North Carolina, 24% of 8th grade students performed at the proficient level or above. This compares with 29% nationally, ranking our state's 8th graders 24th in science. The range of scores in the top tier of states was from 36% to 41%, so North Carolina's 8th grade students will need to gain at least 12 percentage points, and perhaps more, since other states will also be working to improve their performance.

In all of the NAEP assessments, much larger percentages of white students performed at the proficient or advanced levels than was true for black or Hispanic students. The differences were especially large in mathematics, where 32% of white 4th graders but only 4% of black 4th graders were working at the proficient level or above. In 8th grade mathematics, the corresponding percentages were 32% for whites and 5% for blacks.[3]

The target calls for North Carolina to be in the top ten states in NAEP assessments. Currently, this target has been reached only in 8th grade writing. North Carolina students scored at or above the national average in 4th grade math and 8th grade reading. In science, North Carolina's 8th grade students placed 24th in the nation. The most recent NAEP reports show that North Carolina improved in 4th and 8th grade mathematics and had no statistically significant change in 4th grade reading, although a slightly lower percent of students scored at the proficient level in 1998 than in 1996.

Nine out of 10 NC students will score at or above grade level on End-of-Grade (EOG) and End-of-Course (EOC) examinations.

PERCENTAGE OF STUDENTS SCORING AT OR ABOVE GRADE LEVEL ON NC'S EOG AND EOC EXAMINATIONS

Every year since 1992-93, North Carolina students in grades 3 through 8 have been tested in reading and mathematics through a testing program administered by the state's Department of Public Instruction (DPI). Similarly, students enrolled in 10 high school courses have taken state-created tests. All of these tests closely mirror the state curriculum for the grade and course. The reading curriculum emphasizes comprehension skills, including understanding written material, being able to connect what has been read to other knowledge, and the ability to evaluate information in a written text. The mathematics curriculum follows the National Council of Teachers of Mathematics standards and is similar in content and focus to the skills assessed by NAEP.

Test scores can be placed in any one of four achievement levels, with levels III and IV representing work that is at or above grade level. When establishing scores for achievement levels, DPI assembled panels of teachers from all grade levels to ensure that the level III and IV scores did, indeed, represent grade level work for each grade. Nevertheless, a much larger percentage of students are successful on these tests than is true for the NAEP assessments. At least in part, this may be attributed to students' familiarity with test formats, since the End-of-Grade tests rely solely on multiple choice responses and do not include open-ended questions that require students to formulate a complex response. By contrast, NAEP assessments do include such open-ended questions.

These tests are important because they measure the degree to which students are learning the skills and knowledge that are expected of them at each grade level. This, in turn, will prepare students to be successful at the next higher grade level.

Some states have been criticized for excluding some students from tests. NAEP, for example, reports that the percent of special education students excluded from their testing has doubled in some states, including North Carolina. When examining the state End-of-Grade testing program, however, it was noted that less than 5% of the total population in grades 3 through 8 were exempted from testing during 1999-2000, either because of disability or because of limited English proficiency.

During 1999-2000, a larger percentage of students scored at or above grade level in reading and mathematics at grades 3, 4, 5 and 8 than was true the year before. When all the grades are combined, three out of four students were at or above grade level in reading, while eight out of 10 students were at or above grade level in mathematics. The percentage of students receiving passing scores in both tests also improved from 69% in 1997-98 to 70% in 1999-2000, continuing a slow improvement trend. In fact, in 1992-93, the percent of students proficient in both reading and mathematics was just about 53%. So there has been a 17 percentage point improvement over the eight years that these tests have been used.

Since 1992-93, there has been a steady increase in the percent of students scoring in level IV (the highest level) in

all grades in both reading and mathematics, and there has been a corresponding decrease in the percentage of students scoring in achievement level I. There remains a large difference between the percent of black, Hispanic, and American Indian students and the percent of Asian American and white students performing on grade level. These differences exist at each grade level and in both reading and mathematics. Improvement has occurred in all racial groups, however.

In the high school courses that are tested, a larger percentage of students earned grade level ratings on the End-of-Course tests for Algebra I, Algebra II, geometry, physical science, chemistry, physics, and English I during 1999-2000 than in the prior year. There was no change in the rate of students scoring at grade level for biology and for the Economic, Legal, and Political Systems course (ELPS), which is similar to a civics course, although it covers a wider range of material. There was a decline in the percentage of students demonstrating proficiency on the End-of-Course test in U.S. history.

Thus, in none of the tested areas has the target of 90% at or above grade level been met. But there are clear improvement trends for elementary and middle school reading and mathematics and in high school tests, except for ELPS, U.S. history, and biology. Given the pace of improvement on all End-of-Grade scores, it seems possible that the goal of 90% of students at or above grade level on reading and mathematics tests could be reached before 2010. Unless the pace of improvement picks up sharply, however, the goal of 90% of students at or above grade level in the high school courses will not be achieved by 2010.

North Carolina will eliminate the minority achievement gap.

GAP IN PERCENT PROFICIENT ON NAEP AND PERCENT AT OR ABOVE GRADE LEVEL ON NC EOG AND EOC EXAMINATIONS

For many years, educators, government officials, and parents have seen a gap in academic achievement scores between groups of white students and groups of black, Hispanic, and American Indian students. Of course individual black students do earn higher scores than individual white students on tests. But on average, white students tend to outscore students from other ethnic and racial backgrounds. The reasons that underlie this achievement gap are complex and not very well understood. The differences, however, are quite real and consistent.

Disaggregated test scores show the gap between white and minority group scores on NAEP assessments and North Carolina's End-of-Grade (EOG) and End-of-Course (EOC) tests.

Of course, the gap can be expressed in many ways. On the North Carolina EOG and EOC tests, for example, scores are commonly expressed in two ways. The percent of students scoring at or above grade level is one common measure. Also, average points scored is often reported.

Depending on which measure is used, the gap can look quite different. If we measure the gap in terms of the percentage of students who are at or above grade level on EOG and EOC tests, we find that on average across all grades, 81% of white students scored at grade level, compared with 54% of black students, 63% of Hispanic students, and 67% of American Indian Students.[3] As the *Data Report* reflects, this means that the gap between white and black performance is 27 percentage points, the gap between white and Hispanic performance is 18 percentage points, and the gap between white and American Indian performance is 14 percentage points.

However, if we use the average scale score as our basis for comparison, a somewhat different picture seems to emerge. For white students, the average scale score in reading for grades 3 through 8 combined was 157, while the score in mathematics was 164. For black students in these same grades, the average in reading was 150 and the average in mathematics was 155. Among Hispanic students, the average reading score was 151, while mathematics was 157. American Indian students scored slightly higher on reading (157) than on mathematics (151).

At first glance, the majority-minority differences measured in average scores seem less dramatic than the differences measured in terms of the percentage at grade level. But only a few points may mark the difference between one grade level and the next. So the differences between white and minority scale scores — differences of up to seven points for reading and 13 points for mathematics — may represent a gap of two or more whole grade levels.

Both ways of gauging the gap are accurate. It is just that one way focuses on the percentage of each group who surpass a certain cutoff score, while the other focuses on the differences between the average scores for students from each group. We have chosen to report the gap expressed in terms of the percentage at grade level mainly because that is the statistic on which the State Board of Education has chosen to focus. Yet no matter how the differences are measured, they are real and troublesome.

While it is important to acknowledge the existence of the gap, it is also important to note that the achievement levels of all groups of students have increased over the past several years on some measures. The percent of black students scoring at or above grade level on both the North Carolina End-of-Grade tests in reading and mathematics has gone from 50% in 1992-93 to 49% in 1999-2000. Importantly, this improvement trend can be demonstrated for all groups of students, white and minority. The percent of white students scoring at grade level or above grade level has risen from 63% to 80%.

The gap in achievement, however it is calculated, will be closed only if the rate of improvement in scores increases faster for black and other minority group students than the rate for white students. While the gap on End-of-Grade and End-of-Course tests has narrowed slightly in the last 8 years, it seems unlikely that we will achieve the target of eliminating the gap in rates of achievement in the next 10 years if the current trends continue.

NC will be 1st in the nation in the percent of students taking advanced courses.

As the percentage of students in middle and high schools who take advanced courses in mathematics and science increases, more students will enter college or the workplace prepared to perform challenging work requiring complex verbal and mathematical reasoning skills. Indeed, success in these "gatekeeper" courses allows students to participate in other more rigorous courses in high school since courses in math and science are often offered in sequences with required prerequisite courses. Students who start the math sequence early (in Grade 8) are able to take more mathematics courses. This, in turn, generally enables students to do better on college admissions tests and in college. Three indicators of improvements in this area are the percent of 8th grade students taking Algebra I (normally thought of as a high school course), and the percent of high school students electing to take advanced mathematics and science courses.

PERCENTAGE OF STUDENTS TAKING ADVANCED COURSES IN MATH AND SCIENCE

The Council of Chief State School Officers, an organization of the heads of departments of education in most states, studies the issue of advanced course taking. Their most recent report shows that only three states have a higher percentage of 8th graders enrolled in Algebra I than does North Carolina. Their report indicates, however, that the percent of 8th grade students in North Carolina enrolling in Algebra I declined by 3 percentage points from the prior year. With 27% of 8th graders taking Algebra I, North Carolina is still well ahead of the national average of 18%.

In 1998-99, there was no change in the percent of North Carolina high school students enrolled in advanced mathematics courses, including geometry, Algebra II, trigonometry, pre-calculus, and calculus. The state is tied for 2nd place in the national rankings, behind Nebraska and tied with Massachusetts, on this measure. The percentage of students taking advanced science courses, including chemistry, physics, and advanced science, in North Carolina high schools rose by one percentage point in 1998-99. With 31% of students enrolled in advanced science classes, North Carolina tied for 10th in the nation on this measure. The national average is 26%.

The target is for North Carolina to be number one on each of these indicators. While the state is ahead of the national average on each of these indicators and is within the top ten states on each of them, this target has not been achieved.

95 percent of NC's students will finish high school.

PERCENTAGE OF STUDENTS COMPLETING HIGH SCHOOL OR GED

Completing high school is clearly an important accomplishment for young people. Not only does this allow them to continue their studies in colleges or universities, but most jobs today require at least a high school diploma. In addition, completion of high school is found to be an important factor in lifetime earnings and other important social measures. The U.S. Department of Commerce's Bureau of the Census calculates the percent of 18- to 24-year olds in each state who are not currently enrolled in high school and who hold a high school credential (a diploma, Certificate of Completion, or GED) to determine the high school completion rate. In the report for 1996-98, the North Carolina percentage was 85%, down slightly from 87%, registered the year before. The difference is not statistically significant.

The *First in America* target for school completion is set at 95%. Clearly, this target has not been achieved yet. It should be possible, however, to meet the target by the end of the decade if resources and attention are directed to attaining this goal.

NC will be one of the top ten states in program completion rates for exceptional students.

The U.S. Department of Education's Office of Special Education Programs collects information annually on the number and percent of students who successfully complete their special education program, either by graduating from high school or by completing their Individual Education Program (IEP). For the most part, exceptional students are expected to complete the same course of studies as other students in order to qualify for a high school diploma. The IEP is a plan that takes into account the adaptations and supports that an exceptional student will need to complete his or her education.

PERCENTAGE OF EXCEPTIONAL STUDENTS AGE 14 OR OLDER WHO SUCCESSFULLY COMPLETE THEIR SPECIAL EDUCATION PROGRAM

In 1996-97, 48% of North Carolina's exceptional students aged 14 or older successfully completed their program and/or graduated. This is the same percentage of students who completed their program and/or graduated the year before. This puts North Carolina above the national average of 46%, and in a tie for 17th place on this measure.

The target, however, calls for North Carolina to be one of the top ten states in the percent of special education students graduating high school or completing their IEPs. Reaching this target will require a concerted effort since the current comparison shows no change in the percent of special education students completing their programs.

NC will be among the 10 states with the lowest high school dropout rate.

PERCENTAGE OF TEENS AGE 16 TO 19 WHO ARE HIGH SCHOOL DROPOUTS*

Computing school dropout rates is a complex problem. Different researchers and policy makers in different states compute the rate in different ways. In some analyses, the dropout rate includes students who later finish a GED program, thus reducing the rate. In other cases, students can be counted more than once if they leave school in two different years. Finally, different states use different time-frames to report dropouts. Because North Carolina uses a different data collection cycle than called for by the National Center for Education Statistics (NCES), North Carolina's data are not reported by NCES.

To avoid these problems, we chose to use data reported by the Annie E. Casey Foundation. Casey Foundation researchers use special tabulations of the *Current Population Survey* database prepared by the U.S. Bureau of Labor Statistics. They report the percent of 16- to 19-year-olds who are school dropouts. To increase statistical reliability, they report 3-year averages.

In 2000, the Foundation reported that 12% of North Carolina's 16-19 year olds were classified as high school dropouts. This is the same as was reported for the prior year and places NC below the U.S. average of 10%. In the state-by-state ranking, NC is tied with four other states for 41st out of 51 states on this measure. It seems unlikely that the target of reducing the dropout rate to the top ten level (7%) can be achieved in the near future. Very rapid change in the dropout rate will be necessary to reach the target of being among the top ten states with the lowest dropout rate.

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK

EVERY GRADUATE READY FOR COLLEGE AND WORK

• Nine out of 10 NC students will pass a tough high school exit exam.	Percentage of students passing an exit examination	*Available Spring 2003.*						
• NC will be one of the top 10 states in SAT scores.	Average SAT scores and adjusted SAT scores for NC students	AVERAGE SAT SCORES:						
		LATEST NC SCORE: 988	PRIOR NC SCORE: 986	CHANGE: ↑	NC RANK: 40th	US AVERAGE: 1019	TARGET SCORE: 1131	RANK: 1197(ND)
		SAT SCORES ADJUSTED FOR PARTICIPATION RATES:						
		LATEST NC SCORE: 1029	PRIOR NC SCORE: 1025	CHANGE: ↑	NC RANK: 38th	US AVERAGE: 1053	TARGET SCORE: 1088	RANK: 1114(MI)
• NC will be among the top 5 states in the number of Advanced Placement (AP) exams scored at or above level 3.	Number of AP exams scored at or above level 3 for every 1,000 11th and 12th graders	LATEST NC SCORE: 135	PRIOR NC SCORE: 104	CHANGE: ↑	NC RANK: 19th	US AVERAGE: 113	TARGET SCORE: 181	RANK: 504(DC)
• NC will be one of the top 10 states in the percentage of students attending college.	Percentage of students enrolled in two- and four-year programs of higher education	LATEST NC SCORE: 54%	PRIOR NC SCORE: 49%	CHANGE: ↑	NC RANK: Tied for 33rd	US AVERAGE: N/A	TARGET SCORE: 62%	RANK: 75%(MA)
• Nine out of 10 NC students who complete a vocational course of study will be highly rated by their employer.	Percentage of vocational graduates ranked above average when compared to other new employees	LATEST NC SCORE: 71%	PRIOR NC SCORE: 70%	CHANGE: ↑				

EVERY GRADUATE READY FOR COLLEGE AND WORK

In this section, we consider measures specifically related to students' preparation for college and/or work. If a letter grade were given for the priorities within this goal area, North Carolina would earn a B- since 83% of the goal has been attained. While North Carolina students have improved their performance on many of these measures, including the SAT, so have students across the country. Indeed, while average scores on the SAT have been going up, the differences among the states is relatively small. North Carolina's average score was about 87% of the target. Moreover, both the number of students taking Advanced Placement exams and their performance on those exams have been increasing. In this section, we also include information on the percent of North Carolina students continuing on into higher education and information about the quality of recent school graduates who enter the workplace.

Nine out of 10 NC students will pass a tough high school exit exam.

PERCENTAGE OF STUDENTS PASSING AN EXIT EXAMINATION

North Carolina high schools offer a variety of courses at a variety of levels of difficulty to students. Some students want to take highly challenging courses, whereas other students need courses that, while conveying the important knowledge and skills, do so in a different way or at a different pace. How, then, can we ensure that a high school diploma represents some basic standard of competence? One way is through the use of an exit exam that requires students to demonstrate the skills and knowledge that we expect high school graduates to possess.

During the 1970's, many states, including North Carolina, instituted "basic competency" examinations that were intended to set an objective standard that any graduate of a high school could demonstrate. Unfortunately, the achievement levels set for these examinations were often very low. In North Carolina, for example, the competence level was set at about 6th grade. Over time, this achievement level has been raised. Today's North Carolina high school graduates must pass a competency examination set at the 8th grade level, and high school sophomores take a comprehensive test of reading and mathematics set at the grade 10 level. The General Assembly and the State Board of Education have enacted law and policy that will require all high school graduates, beginning with the class of 2003 to pass a tough exit examination that calls for a demonstration of mastery of reading, mathematics, and other subjects. Because this examination is still in development, we will not have scores to report until 2003.

NC will be one of the top 10 states in SAT scores.

The SAT evaluates students' readiness for college. The score reported adds together the scores for verbal and mathematics achievement, yielding a score from 800 to 1600. This score is used by many colleges and universities as part of the admissions process and may also be used in the awarding of scholarships and other financial assistance. The score is also widely reported in newspapers and magazines as a measure of quality of schools and school districts, despite the fact that the Educational Testing Service, which administers the SAT, has publicly discouraged the use of the test as an indicator of school, district, or state education system quality.

While SAT scores are viewed by many members of the press and the public as important indicators of quality, they generally represent a very poor measure of a state school system's performance. Eighty percent (80%) of the state-to-state variance in scores simply reflects the percentage of students who take the test in each state.[1] If the percentage of students who take the test is small and elite enough, a state can do well even if its public school system is poor. Among the ten states with the highest SAT scores, none had a participation rate greater than 9%. By contrast, among the 10 lowest performing states, all had participation rates greater than 52%.

Why then, do we report SAT scores? They do tell us something about whether students who want to attend college are well prepared to do so. Second, they are measures that are widely reported, whether appropriately or not. One way to minimize the potential for misunderstanding of SAT scores is to adjust scores so that differences in participation are considered.

AVERAGE SAT SCORES AND ADJUSTED SAT SCORES FOR NC STUDENTS

North Carolina has made consistent gains on this test over the years, but so have other states. While the state's trend is improving, with this year's average score 2 points higher than last year's average score, the same is true for other states. The result is that the state's scores have improved, but the ranking has not changed. North Carolina's 1999-2000 average score of 988 placed it 48th in the nation, below the national average of 1019. Because North Carolina's university system requires the SAT for admission, 64% of our students took the SAT. The rank order problem is complicated by the fact that all of the states' scores are bunched up in a relatively small portion of the 1600 point rating scale — state scores span 231 points from 966 to 1197.

It is possible to adjust statistically the states' scores to take participation into account. This allows for the comparison of scores from all states, treating them as if each state had the same participation rate. This procedure would increase North Carolina's average score to 1029, as compared to a national average of 1053. While the state's rank improves, it only goes up to about 38th in the nation. Even with the adjustment for participation, then, we do not approach the target of being among the top ten states on the SAT.

NC will be among the top 5 states in the nation in the number of Advanced Placement (AP) exams scored at or above level 3.

NUMBER OF AP EXAMS SCORED AT OR ABOVE LEVEL 3 FOR EVERY 1,000 11TH AND 12TH GRADERS

The Advanced Placement (AP) Program of the College Board offers students the opportunity to complete some college courses while still in high school. This program not only provides an enriched curriculum, but it can result in real cost savings, since students enter college with credit for courses taken in high school, thus shortening the time needed to complete a college degree. The Educational Testing Service (ETS) administers the AP program. ETS specifies the topics and skills to be addressed in the AP course, but relies on high schools to provide instruction following the rigorous curriculum. In North Carolina, more than 87% of public high schools offer AP courses.

The instruction and learning in these courses are verified through the AP Exams. The exams are graded on a scale of 1 to 5, and colleges may award credit to students with a score of 3 or better. This indicator tells us something about how well our highest-ability students stack up against those in other states.

While the outcomes of the AP program can be expressed in many ways, a useful way to think about the program is in terms of participation among all eligible students. For this measure, the number of AP exams receiving a grade of 3 or above for every 1,000 11th and 12th graders enrolled in North Carolina high schools is reported. This statistic has the benefit of providing information about both the extent of AP course-taking and providing information about the quality of learning in those courses.

In 1999, there were 104 AP exams with acceptable scores per 1,000 students enrolled in grades 11 and 12. In 2000, this improved to 135 per 1,000. This places North Carolina at 10th in the nation on this measure, above the national average of 113 per 1,000. On this measure, North Carolina is among the top ten states, but has not yet reached its target of 5th in the nation. This improvement comes at a time when more students in North Carolina are participating in the AP program, and, proportionally, more students are taking more AP courses. The percent of tests taken that receive a score of 3 or better is also going up. If these improvement trends continue, North Carolina could achieve the goal of being among the national leaders on this measure.

Related Information and Perspectives

The *First in America* target includes as the base, all students enrolled in grades 11 and 12 in North Carolina. If we consider only the students who participate in the AP program, the improvement trends can be viewed in a different way. In 1999-2000, 21,871 students in grades 11 and 12 took 37,337 AP exams, as compared with 20,170 students taking 34,169 exams the year before. Thus, both the number of students enrolled in AP courses and the number of exams per student has increased. Importantly, the percent of exams awarded a grade of 3 or better also increased in 2000 as compared with 1999. Over time, the trends for AP participation and quality have been up for North Carolina.

GED students, Vance-Granville Community College.

NC will be one of the top 10 states in the percentage of students attending college.

PERCENTAGE OF STUDENTS ENROLLED IN TWO- AND FOUR-YEAR PROGRAMS OF HIGHER EDUCATION

A good high school education prepares students to enter work or to continue their education at community colleges or universities. Many jobs in the future will require advanced, highly specialized training. In fact, more and more jobs in North Carolina already require highly skilled employees. So continuing on to college is an important measure of the educational health of a state. There are several different methods for calculating the rate of students going on to higher education.

The National Education Goals Panel calculates college-going rates for all states in the nation. Using data from the National Center for Education Statistics of the U.S. Department of Education, the Panel computed college attendance rates by comparing the reports of first-time freshman enrollments in four-year colleges and universities with the high school graduation rates from the prior year.

On this measure, the target is for North Carolina to be among the top ten states in the nation. In 1996, the college-going rate for North Carolina students was 54%, up from 49% in 1992. This rate put North Carolina in 33rd place among all the states. While the trend is up for the state, its rank order among all the states remains unchanged. Thus, we have not progressed in relation to the target.

Related Information and Perspectives

The University of North Carolina (UNC) also calculates enrollment data and reports that, in 1998, as many as 68% of high school graduates from the prior June were enrolled in higher education. This is the continuation of a 10-year trend of improvement. The college-going rate (excluding students enrolled in business and trade schools) was at the national average for 1998 according to UNC calculations.

Nine out of 10 NC students who complete a vocational course of study will be highly rated by their employer.

PERCENTAGE OF VOCATIONAL GRADUATES RANKED ABOVE AVERAGE WHEN COMPARED TO OTHER NEW EMPLOYEES

Vocational training and retraining are important because the nature of employment in North Carolina has changed radically in the last 50 years. In 1950, 60% of jobs were classified as "unskilled" by the Bureau of Labor Statistics. In 2000, that had shrunk to 15%.[1] Last year, just under 70% of North Carolina high school students were

enrolled in at least one vocational education course. In many cases, these courses were part of a sequence that is designed to provide training to enable graduates to find employment in a particular field. The NC Department of Public Instruction (DPI) surveys more than 13,000 employers, asking them to assess the level of preparedness for work of students who have completed a vocational education program in comparison to other new employees of about the same age.

In 1999, DPI reported that 71% of vocational education completers were rated above average, up slightly from 70% reported in 1997. This is in comparison to ratings for other employees of about the same age who had not completed a vocational education sequence. In the most recent survey, employers rated 67% of these non-completers as above average, just down from 68% in 1997.

TARGETS — INDICATORS — SCORES, CHANGE, AND RANK

Change: ↑ North Carolina's score was significantly better / ↓ North Carolina's score was significantly worse / ↔ Analysis: North Carolina's score will continue — change was not significant. /* On this indicator a lower score is better, a higher score is worse.

EVERY SCHOOL ACCOUNTABLE FOR STUDENT LEARNING

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK						
• NC's system of standards, assessments, and accountability will be consistently ranked among the best in the nation.	External evaluations of standards, assessments, and accountability systems	LATEST NC SCORE: A / 95%	PRIOR NC SCORE: B+/ 89%	CHANGE: ↑	NC RANK: 6th	US AVERAGE: N/A	TARGET SCORE: A+/ 97%	PERFECT: A / 100% (98)
		(*Education Week* evaluates standards, assessments, and accountability systems.)						
		LATEST NC SCORE: B- / 2.8 GPA	PRIOR NC SCORE: C / 2.0 GPA	CHANGE: ↑	NC RANK: Tied for 5th	US AVERAGE: C- / 1.72 GPA	TARGET SCORE: C+ / 2.5 GPA	PERFECT: A+/3.6 GPA (GA)
		(Fordham Foundation ratings are based on an assessment of state standards.)						
• Nine of 10 NC schools will be recognized as Schools of Excellence or Schools of Distinction by the ABCs program.	Number and percentage of schools receiving each ABCs designation			LATEST NC SCORE:		PRIOR NC SCORE:	CHANGE:	
		SCHOOLS OF EXCELLENCE		75 (4%)		50 (3%)	↑	
		SCHOOLS OF DISTINCTION		510 (24%)		408 (21%)	↑	
		LOW PERFORMING SCHOOLS*		45 (2%)		13 (.7%)	↓	

EVERY SCHOOL ACCOUNTABLE FOR STUDENT LEARNING

Over the last ten years, North Carolina has built a system of education standards, assessments, and accountability. Ensuring that the expectations for student learning are clearly articulated and that the assessments are consistent with those expectations is one aspect of this system. Similarly, the rewards and sanctions for schools, educators, and students are also an important part of the system of accountability. In this section, we detail how others view the state's system of standards, assessments, and accountability and how well schools are doing, as measured by the system. In this area, North Carolina appears to fall well short of the goal. This priority's score is depressed by a single indicator — performance on the ABCs. On measures of our state's accountability system, high marks were earned. However, the failure to perform well in this priority is the result of not having more schools designated as Schools of Excellence or Schools of Distinction.

NC's system of standards, assessments, and accountability will be consistently ranked among the best in the nation.

EXTERNAL EVALUATIONS OF STANDARDS, ASSESSMENTS, AND ACCOUNTABILITY SYSTEMS

What do our state's academic standards and systems of assessment and accountability look like to policy and education experts outside of North Carolina? In order to ensure that we are measuring the right goals in the right way, it is important to consider the views of our state's efforts by those with no vested interest in our policy decisions. Two groups who have studied these matters are *Education Week*, a national journal focused on education issues, and the Thomas B. Fordham Foundation, a non-profit organization that evaluates states' academic standards.

The *Education Week* report is compiled from data collected by the American Federation of Teachers and other government and non-government agencies and considers the clarity and specificity of state standards, the use of public accountability reports, rewards for schools and districts, and support for low-performing schools.

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In 1999, *Education Week* gave North Carolina a score of 89%, or a grade of B+, on standards, assessments and accountability systems. In 2000, a grade of A, with 95%, was awarded to the state. This improvement places North Carolina 4th in the nation.

The Fordham Foundation, which takes a politically conservative view of education, evaluates state curriculum standards in five core areas: English, history, geography, mathematics, and science. The Foundation commissions experts in each of these areas to develop and apply criteria that include, but are not limited to, clarity, organization, coverage, quality and intellectual rigor. Each subject area is awarded a letter grade, and a grade point average for the entire curriculum is then calculated.

In 2000, the Foundation gave North Carolina a grade of B-, with a grade point of 2.8, up from the grade of C/2.0 in 1998. The current grade puts North Carolina in 5th place in the nation, well within the ranking of the top ten states.

The target calls for North Carolina's system of standards, assessments, and accountability to be consistently ranked among the best in the country. The two independent examinations of our state's system indicate that this target is being met.

Nine of 10 NC schools will be recognized as Schools of Excellence or Schools of Distinction by the ABCs program.

NUMBER AND PERCENTAGE OF SCHOOLS RECEIVING EACH ABCs DESIGNATION

In 1996-97, North Carolina launched the ABCs of Public Education. This program evaluates elementary and middle school performance on the basis of two standards. The actual growth of students' skill in reading, mathematics and writing is measured and compared with a prediction based on past performance. The prediction formula, developed by the Department of Public Instruction, calculates for students in each grade and each school a unique growth target based on their own performance in the prior year as compared with the performance of other students in that grade throughout the state. The absolute performance of a school is calculated by figuring the percent of students whose End-of-Grade tests indicate that they are performing at or above grade level. The two standards are then combined and schools are designated as meeting or exceeding growth expectations or failing to achieve the growth standard. If a school fails to meet the growth standard and has fewer than 50% of students working at or above grade level in reading, mathematics, and writing, then the school is designated low-performing. Schools that fail to achieve their growth expectation but which have more than 50% of students working at or above grade level are given no recognition.

Up until 2000-2001, the evaluation model for high schools has been different from the elementary and middle school model. Instead of measuring growth of the same students from one year to the next, the high school model compared performance of different groups of students as measured by End-of-Course tests. Other measures, including the percent of graduates earning a college preparatory diploma, improvements in the percent of students passing the high school competency test, and performance of students on the 10th grade comprehensive test were also used to assess school performance. School designations, however, are the same for schools at all instructional levels.

During 1999-2000, 2115 public schools were included in the ABCs model. Participating schools can be recognized as Schools of Excellence or Schools of Distinction, based primarily on the performance standards. Schools of Excellence have more than 90% of students working at or above grade level and have met their growth expectations, while Schools of Distinction have 80% to 90% of students working at or above grade level. Low Performing Schools have less than 50% of students working at or above grade level and fail to achieve their predicted academic growth for the year.

The target in this area is for 90% of North Carolina schools to be either Schools of Excellence or Distinction. In school year 1999-2000, 73 schools in the state were in the School of Excellence category, up from 50 schools the year before. Also, 510 schools were awarded the School of Distinction designation, up from 408 the year before. Thus, 28% of all schools in the state are either Schools of Distinction or Schools of Excellence, up from 24% in 1998-99. If current trends continue, the target will not be met in this decade.

In addition to these two designations, schools can also be recognized for improvements in their performance. Of these, 959 (45%) were determined to be schools with Exemplary Growth, while 514 schools (24%) achieved their expected growth status. So, 70% of schools achieved or exceeded their expected growth goal. There were 597 schools (28% of all schools) that were deemed No Recognition schools, while 45 (2%) were identified as Low Performing, increasing from 13 Low Performing schools in school year 1998-99.

High Student Performance: Summary of Performance

Measured against the performance targets for student achievement, North Carolina receives a grade of C on this goal. Within the three priority areas, however, the performance is quite different.

In the priority area, *Every Student in School and Making Strong Progress*, the state is 74% of the way to attaining the goal. Solid or better performance on the National Assessment of Educational Progress, on North Carolina's End-of-Grade tests, and on the rate of program completion by special education students strengthen the grade on this priority. A relatively high dropout rate and the large gap between the scores of the white majority and ethnic minorities pull the score down sharply. Closing the "minority achievement gap," as it has come to be called, may be the single most important and formidable challenge facing the state's effort to become *First in America*.

On the priority *Every Graduate Ready for College and Work*, the state is performing at 83% of the target performance level. Strong showings on Advanced Placement Examinations and employers' ratings of vocational course completers represent the positive highlights of performance on this priority. Yet low rankings on the SAT and on the rate of college attendance continue to present problems here.

Finally, on the priority *Every School Accountable for Student Learning*, North Carolina is only 66% of the way to goal accomplishment. The state's standards and accountability system are sound or even superior. But in fewer than a third of all schools are the great majority of students — 80% or more — performing at grade level. The essence of the target here is for nine out of 10 schools to bring at least 80% of their students to grade level — a daunting task.

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[1] J. Campbell, et al., *NAEP 1998 Reading Report Card for the Nation and the States* (Washington, DC: Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1999). NAEP reports on the outcomes of the National Academy of Sciences review of NAEP scoring procedures.

[2] U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1996 and 1992 Mathematics Assessment Achievement Level Data Tables. Tabulations from NC Education Research Council, 2000, available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

[3] These averages are weighted in proportion to the number of students in each group who took the test.

[4] Brian Powell and Lala Carr Steelman, "Bewitched, Bothered, and Bewildering: The Use and Misuse of State SAT and ACT Scores," *Harvard Educational Review* 66 (1996): 1, 27-59. Brian Powell and Lala Carr Steelman, writing in the *Harvard Education Review* propose a statistical method for correcting the influence of participation rates on SAT scores. This method is used in our analysis.

[5] Public Schools of North Carolina, Instructional and Accountability Services, *Workforce Development Education, Workforce Development Education. The Future. Job Skill Level Changes, 1950-2000*, available from http://www.ncpublicschools.org/workforce_development//publications/trend_data/facts_9.html.

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Data Sources and Notes for High Student Performance

EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS

Percentage of students scoring proficient or higher on NAEP assessments

NAEP grade 4 and 8 reading

Campbell, J., et al. *NAEP 1994 Reading Report Card for the Nation and the States*. Washington, DC: Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1996.

Campbell, J., et al. *NAEP 1998 Reading Report Card for the Nation and the States*. Washington, DC: Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1999.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress. 1998 Reading Assessment Achievement Level Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

The Nation's Report Card, the National Assessment of Educational Progress (NAEP), is the only nationally representative and continuing assessment of what America's students know and can do in various subject areas. Since 1969, assessments have been conducted periodically in reading, mathematics, science, writing, history, civics, geography, the arts, and other fields. Since 1990, NAEP assessments have also been conducted at the state-level in reading, mathematics, writing, and science. For both the national and state assessments, representative samples of students are assessed. North Carolina has participated in each of the state-level assessments.

NAEP assessment items are chosen through a consensus process involving educators, policymakers, teachers, representatives of the business community, assessment and curriculum experts, and members of the public. Participants attempt to identify the essential concepts in each subject matter assessed. As part of the assessments, students, teachers, and schools also answer general background questions.

NAEP results are reported using three achievement levels: basic, proficient, and advanced. The basic level denotes partial mastery of the knowledge and skills that are fundamental for proficient work at a given grade. The proficient level represents solid academic performance. Students reaching this level demonstrate competency over challenging subject matter. The advanced level signifies superior performance at a given grade.

The 1998 NAEP Reading Assessment contained both multiple-choice and open-ended questions. The assessment asked students to demonstrate three types of reading skills: reading for literary experience, reading to gain information, and reading to perform a task.

In 1998, 40 states participated in the fourth grade NAEP Reading Assessment and 37 states participated in the eighth grade Reading Assessment.

NAEP grade 4 and 8 math

Reese, C.M., et al. *NAEP 1996 Mathematics Report Card for the Nation and States*. Washington, DC: Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1997.

U.S. Department of Education, National Center for Educational Statistics, National Assessment of Education Progress. 1996 and 1992 Mathematics Assessment Achievement Level Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

See data note for High Student Performance, EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS, Percentage of students scoring proficient or higher on NAEP assessments, NAEP grade 4 and 8 reading.

The 1996 NAEP Mathematics Assessment measured students' abilities in five areas: number sense, properties, and operations; measurement; geometry and spatial sense; data analysis, statistics, and probability; and algebra and functions.

In 1996, 44 states participated in the fourth grade NAEP Mathematics Assessment and 41 states participated in the eighth grade Mathematics Assessment.

NAEP grade 8 writing

Campbell, J.R., et al. NAEP 1998 *Writing Report Card for the Nation and States*. Washington, DC: U.S. Department of Education, NCES, NAEP, 1999.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress. 1998 Writing Assessment Achievement Level Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

See data note for High Student Performance, EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS, Percentage of students scoring proficient or higher on NAEP assessments, NAEP grade 4 and 8 reading.

The NAEP Writing Assessment evaluated student's ability to tell a story, to inform the reader, and to persuade the reader. Students were given 50 minutes to draft a written response to two prompts.

Thirty-six states participated in the eighth grade NAEP Writing Assessment.

NAEP grade 8 science

Bourque, M.L., A. Champagne, and S. Crissman. *NAEP 1996 Science Report Card for the Nation and States*. Washington, DC: U.S. Department of Education, NCES, NAEP, 1997.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress. 1996 Science Assessment Achievement Level Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

See data note for High Student Performance, EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS, Percentage of students scoring proficient or higher on NAEP assessments, NAEP grade 4 and 8 reading.

The 1996 Science Assessment included multiple-choice questions that assessed students' knowledge of scientific facts, constructed-response questions that explored students' ability to explain, integrate, apply, reason about, plan, design, evaluate, and communicate scientific information, and hands-on tasks that probed students' ability to use materials to make observations, perform investigations, evaluate experimental results, and apply problem-solving skills. The assessment covered concepts in earth, physical, and life science.

Forty-one states participated in the eighth grade NAEP Science Assessment.

Percentage of students scoring at or above level III on North Carolina's EOG and EOC examinations

Public Schools of North Carolina, Office of Instructional and Accountability Services, Division of Accountability Services, Reporting Section. *1998-99 North Carolina State Testing Results*. Raleigh, NC: NCDPI, 2000.

Public Schools of North Carolina, Office of Instructional and Accountability Services, Division of Accountability Services, Reporting Section. *1999-2000 Preliminary North Carolina State Testing Results*. Raleigh, NC: NCDPI, 2000.

The North Carolina End-of-Grade (EOG) tests are multiple-choice tests that are administered to all eligible students in grades 3-8 within the final three weeks of school. The test of reading comprehension requires students to read passages and then answer questions directly related to the passages. The mathematics assessment tests students' achievement in seven areas: numeration, geometry, patterns and pre-algebra, measurement, problem solving, data analysis and statistics, and computation.

The North Carolina End-of-Course (EOC) multiple-choice tests (with the exception of the English II writing test) are administered within the final ten days of the school term when and where the courses are taught. EOC tests are administered in the following subjects:

Algebra I: This test assesses the three broad topics of the Algebra I curriculum: (1) basic operations, equations, and inequalities; (2) functions and graphing; and (3) polynomials and nonlinear equations.
Algebra II: On this test, students are asked to explore the relationship between coefficients and solutions of a quadratic equation. The emphasis on this test is on problem solving (regardless of method used to solve the problem).
Geometry: The test emphasizes problem solving (regardless of method used to solve the problem).
Physical Science: Students are expected to have knowledge of important principles and concepts, understand and interpret laboratory activities, and relate scientific information to everyday situations.
Biology: Students are expected to have knowledge of important principles and concepts, understand and interpret laboratory activities, and relate scientific information to everyday situations.
Chemistry: Students are expected to demonstrate knowledge of important principles and concepts, understand and interpret laboratory activities, and relate scientific information to everyday situations.
Physics: Students are expected to have knowledge of important principles and concepts, understand and interpret laboratory activities, and relate scientific information to everyday situations.
Economic, Legal, and Political Systems (ELP): Test items assess students' understanding of the function and importance of the North Carolina and United States Constitutions; knowing the features of the economic system of the United States and factors that influence the economy; and understanding why laws are needed and how they are enacted, implemented, and enforced.
English I: Editing and revising are presented as peer editing of short student essays. Students are required to edit for sentence formation, usage, mechanics, and spelling. For textual analysis, students read several passages from various genres, including literary, informational, and practical texts. Based on the reading passages, students answer questions, which focus on the application of literary terms and techniques.
US History: Students are expected to have knowledge of important ideas and concepts, understand and interpret events in history, and connect historical people and events across time. Many items ask students to analyze primary and secondary source documents.

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Achievement levels are used to describe EOC and EOG performance because they allow the comparison of student and group performance to preset standards. These standards are based on what is expected in each subject at each grade level. Achievement levels were determined by relating judgments of thousands of North Carolina teachers regarding the performance of each of their students to each student's performance on the end-of-grade multiple-choice tests. The four achievement levels are defined as follows:

Level I: Students performing at this level do not have sufficient mastery of knowledge and skills in the subject area to be successful in the next grade.
Level II: Students performing at this level demonstrate inconsistent mastery of knowledge and skills in the subject area and are minimally prepared to be successful at the next grade level.
Level III: Students performing at this level consistently demonstrate mastery of the grade level subject matter and skills and are well prepared for the next grade level.
Level IV: Students performing at this level consistently perform in a superior manner clearly beyond that required to be proficient at grade level work.

The North Carolina Department of Public Instruction has set its performance standard at the two highest levels — Levels III and IV — on its EOC and EOC examinations. Students performing at or above Level III are considered to be achieving at or above grade level.

Gap in percent proficient on NAEP and percent at or above grade level on NC examinations

National Assessment of Educational Progress composite

Campbell, J., et al. *NAEP 1994 Reading Report Card for the Nation and the States.* Washington, DC: Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1996.

Campbell, J., et al. *NAEP 1998 Reading Report Card for the Nation and the States.* Washington, DC: Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1999.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress. 1998 Reading Assessment Achievement Level Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

Reese, C.M., et al. *NAEP 1996 Mathematics Report Card for the Nation and States.* Washington, DC: Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, 1997.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress. 1996 and 1992 Mathematics Assessment Achievement Level Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

Campbell, J.R., et al. *NAEP 1998 Writing Report Card for the Nation and States.* Washington, DC: U.S. Department of Education, NCES, NAEP, 1999.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress. 1998 Writing Assessment Achievement Level Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

Bourque, M.L., A. Champagne, and S. Crissman. *NAEP 1996 Science Report Card for the Nation and States.* Washington, DC: U.S. Department of Education, National Assessment Governing Board, 1997.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress. 1996 Science Assessment Achievement Level Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

See data note for High Student Performance, EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS, Percentage of students scoring proficient or higher on NAEP assessments, NAEP grade 4 and 8 reading.

As part of the background questionnaire that is administered with NAEP assessments, students are asked to indicate the racial/ethnic subgroup that best describes them. The mutually exclusive response options were: white, black, Hispanic, Asian/Pacific Islander, and American Indian (including Alaskan native). Achievement level data are reported for each subgroup for which a sufficient sample of students was assessed.

The NC Education Research Council computed a weighted average of the performance of each subgroup on NAEP grade 4 and 8 reading, grade 4 and 8 math, and grade 8 writing and science. The performance gap score is the difference between the average score of white students and the average score of students in the minority group indicated.

North Carolina EOG and EOC examinations composite

Public Schools of North Carolina, Office of Instructional and Accountability Services, Division of Accountability Services, Reporting Section. *1998-99 North Carolina State Testing Results.* Raleigh, NC: NCDPI, 2000.

Public Schools of North Carolina, Office of Instructional and Accountability Services, Division of Accountability Services, Reporting Section. *1999-2000 Preliminary North Carolina State Testing Results.* Raleigh, NC: NCDPI, 2000.

See data note for High Student Performance, EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS, Percentage of students scoring at or above level III on North Carolina's End-Of-Grade (EOG) and End-Of-Course (EOC) examinations.

Students were asked to indicate the racial/ethnic subgroup that best described them. The mutually exclusive response options were: white, black, Hispanic, Asian, American Indian, and Multi-racial. Achievement level data are reported for each subgroup for which a sufficient sample of students was assessed.

The NC Education Research Council computed a weighted average of the performance of each subgroup on the EOG reading and math examinations and all of the EOC examinations. The performance gap score is the difference between the average score of white students and the average score of students in the minority group indicated.

Percentage of students taking advanced courses

Blank, Rolf K. and Doreen Langesen. *State Indicators of Science and Mathematics Education.* Washington, DC: Council of Chief State School Officers, 1997.

Blank, Rolf K. and Doreen Langesen. *State Indicators of Science and Mathematics Education.* Washington, DC: Council of Chief State School Officers, 1999.

State departments of education report aggregated totals on course enrollments in science and mathematics to the Council of Chief State School Officers (CCSSO). Data are collected by states through state management information systems. The CCSSO and *Education Week* define "Upper Level Mathematics" as math at levels 2 to 5 — geometry, Algebra II, trigonometry, pre-calculus, and calculus. "Upper Level Science" courses include chemistry, physics, and advanced science. The CCSSO includes data from 27 states in their report of 8th grade algebra enrollments, 31 states in their report of upper level mathematics enrollments, and 29 states in their report of upper level science enrollments.

Percentage of students completing high school or GED

U.S. Department of Commerce, Bureau of the Census. *1995-97 October Current Population Surveys.* Unpublished tabulations prepared by the National Center for Education Statistics and MPR Associates, Inc., 1998.

U.S. Department of Commerce, Bureau of the Census. *1996-98 October Current Population Surveys.* Unpublished tabulations prepared by the National Center for Education Statistics and MPR Associates, Inc., 1999.

This measure is based on the 12-month Current Population Survey (CPS) maintained by the Bureau of Labor Statistics. Each October the Bureau asks respondents in 60,000 households nationwide about the enrollment status of all 18-to-24 year olds in their households. Because of small sample sizes, the state-level completion data are calculated using three-year averages. The high school completion rate is the percentage of the non-high school enrolled population who report that they hold a high school credential (either a high school diploma or an alternative credential, such as a General Educational Development (GED) credential, Individualized Education Program (IEP) credential, or certificate of attendance).

Percentage of exceptional students age 14 or older who successfully complete their special education program

U.S. Department of Education, Office of Special Education Programs, Data Analysis System. *To Assure the Free and Appropriate Public Education of all Children with Disabilities: Twentieth Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act.* Washington, DC: GPO, 1998.

U.S. Department of Education, Office of Special Education Programs, Data Analysis System. *To Assure the Free and Appropriate Public Education of all Children with Disabilities: Twenty-First Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act.* Washington, DC: GPO, 1999.

The U.S. Congress requires that all states report the percentage of exceptional students who successfully complete their special education program by graduating with a diploma, graduating with a certificate, or returning to regular education. The Office of Special Education Programs (OSEP) of the U.S. Department of Education compiles this data for their annual report to Congress. The OESP notes that high school graduation requirements, including exit examinations, course credits, and mandatory age limits, vary considerably from state-to-state and may affect reported graduation rates.

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For individual states, percentages of students with disabilities exiting may sum to more than 100 percent. This is due to the fact that exit data are collected over a 12-month period, while child count data are collected for a single day, December 1. As a result, students ages 14-21 who enter special education after December 1 and exit prior to December 1 may appear in the numerator (exiters) but not in the denominator (child count).

Percentage of teens age 16-to-19 who are high school dropouts

Annie E. Casey Foundation. *Kids Count Data Book: State Profiles of Child Well-Being*. Baltimore, MD: Casey Foundation, 1999. Special tabulations of 1984-1997 *Current Population Survey* microdata prepared by the Bureau of Labor Statistics.

Annie E. Casey Foundation. *Kids Count Data Book: State Profiles of Child Well-Being*. Baltimore, MD: Casey Foundation, 2000. Special tabulations of 1989-1998 *Current Population Survey* microdata prepared by the Bureau of Labor Statistics.

This measure is based on the 12-month *Current Population Survey* (CPS) maintained by the Bureau of Labor Statistics. Each month the Bureau asks respondents in 60,000 households nationwide about their activities related to the labor force and education. The Casey Foundation receives data from the CPS for the nine months that students are typically in school and calculates the average percentage of teens age 16-to-19 who are not in school and have not graduated. Students with a GED or the equivalent are considered high school graduates. In order to increase the reliability of their estimates, the Casey Foundation reports 3-year averages.

Although the National Center for Education Statistics (NCES) produces a yearly report on state dropout rates, North Carolina and 20 other states do not submit dropout data that meets the quality and comparability standards established by NCES. The North Carolina State Board of Education recently adopted the definition and measurement procedures for high school dropouts used by NCES; however, the Board did not adjust the data collection cycle to adhere to NCES requirements. Thus, the Casey Foundation dropout estimates remain the only nationally comparable data available for North Carolina.

EVERY GRADUATE READY FOR COLLEGE AND WORK

Percentage of students passing an exit examination

North Carolina Department of Public Instruction, Office of Instructional and Accountability Services, Division of Accountability Services, Testing Section. *North Carolina High School Exit Exam*. Raleigh, NC: NCDPI, 2000.

The North Carolina High School Exit Exam will be administered for the first time to 11th graders in the spring of 2002. Students who do not pass the exit exam will be given focused remedial instruction and will have additional opportunities to take the exit exam during their 12th grade year.

The North Carolina High School Exit Exam will assess students' proficiency in four competency areas or domains: (1) communication, (2) processing information, (3) problem solving, and (4) using numbers and data. Students must pass four tests each comprised of 80 multiple-choice questions. The tests will cover the following content areas of the *North Carolina Standard Course of Study*: English, reading, and grammar, mathematics (up to and including Algebra I), science (including biology), and social studies (including ELPS and U.S. history).

Results from each of the four tests that comprise the exit exam will be reported using scale scores. In addition, pass/fail status will be reported, as well as the minimum passing score for each test. Information on student performance at the objective level will also be reported to guide focused remedial instruction.

Average SAT Scores and adjusted SAT scores for NC students

SAT scores

Public Schools of North Carolina, Office of Instructional and Accountability Services, Division of Accountability Services, Reporting Section. *The North Carolina 1999 Scholastic Assessment Test*. Raleigh, NC: NCDPI, 1999.

Public Schools of North Carolina, Office of Instructional and Accountability Services, Division of Accountability Services, Reporting Section. *The North Carolina 2000 Scholastic Assessment Test*. Raleigh, NC: NCDPI, 2000.

The SAT is used along with high school transcripts and other information to assess students' competence for college work. The test lasts 3 hours and consists of mostly multiple-choice questions. The verbal sections test the ability to read critically, to understand word relationships, and to understand words in context. The math sections test the ability to solve problems in arithmetic, algebra, and geometry.

SAT scores are useful in assessing the academic preparation of individual students and in making decisions about individual students. Using SAT scores as a single measure to rank or rate states, educational institutions, school systems, schools, or teachers may be less valid because not all students are included. Aggregate scores can, however, indicate the preparation of groups of students who aspire to attend college. In addition, average scores analyzed for a number of years can reveal trends in the academic preparation of students who take the SAT. The maximum score awarded on the SAT is 1600, 800 on the verbal examination and 800 on the mathematics examination.

Adjusted SAT scores

Powell, Brian and Lala Carr Steelman. "Bewitched, Bothered, and Bewildering: The Use and Misuse of State SAT and ACT Scores." *Harvard Educational Review* 66 (1996): 1, 27-59.

Powell and Steelman report that more than 80 percent of the variance in average state SAT scores can be attributed to the percentage of students taking the test. In states where the percentage of students taking the SAT is low, state SAT averages tend to be higher because the test-taking population includes a higher proportion of high-achieving college bound students, and vice versa. For this reason, the *First in America* reports include a ranking of SAT scores adjusted to account for the percentage of students taking the test in each state. The adjusted SAT scores represent what a state's mean SAT score would be if the state had a participation rate that matched the national average.

The following steps were taken in order to adjust states' mean SAT scores by participation rates: (a) A simple linear regression was computed with Mean State SAT Scores as the dependent variable and Mean State Participation Rates as the independent variable; (b) A residual was computed for each state by subtracting the actual value of an SAT score from the predicted value of an SAT score (actual SAT score X estimated slope + intercept); (c) A second simple linear regression was computed ($y = a + bx$) whereby, (a) = the constant unstandardized coefficient; (b) = the unstandardized coefficient for Participation Rate, and the independent variable (x) or "Mean State Participation Rate" was substitute by the National Mean Participation Rate. The value of the second linear regression was added to the residual for each state. These steps were used to adjust states' mean SAT scores for the years 1999 and 2000.

Number of AP exams scored at or above level 3 for every 1000 11th and 12th graders

The College Board, Advanced Placement Program. *Result from the 1999 Advanced Placement Examinations*. New York: 1999.

The College Board, Advanced Placement Program. *Result from the 2000 Advanced Placement Examinations*. New York: 2000.

The Advanced Placement (AP) program, sponsored by the College Board, provides a way for high schools to offer college-level coursework to students. At present, courses and examinations are available in art, biology, chemistry, computer science, economics, English, French, German, government and politics, history, Latin, mathematics, music, physics, and Spanish. Public schools in North Carolina weight the grades given in AP courses to compensate for the increased difficulty. Students are offered the opportunity, but are not required, to take a national AP examination upon completion of an AP course.

AP examinations, which are given in May, are graded on a five-point scale: 5 — extremely well qualified; 4 — well qualified; 3 — qualified; 2 — possibly qualified, and 1 — no recommendation. Grades of 3 and above generally are accepted for college credit and advanced placement at participating colleges and universities.

The *First in America* reports include the number of students for every 1000 11th and 12th graders in public and private schools who receive a score of 3 or above on AP examinations. This number awards states for increasing the number of students who choose to take the examinations and for the absolute performance of these students on the examinations.

Students enrolled in two- and four-year programs of higher education

U.S. Department of Education, National Center for Education Statistics. *Residence and Migration of First-Time Freshmen Enrolled in Higher Education Institutions*. Washington, DC: NCES, 1992.

U.S. Department of Education, National Center for Education Statistics. *Residence and Migration of First-Time Freshmen Enrolled in Higher Education Institutions*. Washington, DC: NCES, 1996.

U.S. Department of Education, National Center for Education Statistics. *Common Core of Data*. Washington, DC: NCES, 1992-93.

U.S. Department of Education, National Center for Education Statistics. *Common Core of Data*. Washington, DC: NCES, 1996-97.

U.S. Department of Education, National Center for Education Statistics. *Private School Universe Study*. Washington, DC: NCES, 1992.

U.S. Department of Education, National Center for Education Statistics. *Private School Universe Study*. Washington, DC: NCES, 1995-96.

The National Education Goals Panel computed 1992 participation rates for higher education by adding 1991-1992 high school graduates from public schools (reported in the *Common Core of Data*) and 1990-1991 high school graduates from nonpublic schools (reported in the *Private School Universe Survey*). Rates for 1996 were computed in the same manner, using 1996-1997 public school data and 1995-96 nonpublic school data.

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Percentage of vocational education graduates ranked above average by their employers when compared to other new employees

Public Schools of North Carolina, Instructional and Accountability Services, Division of Workforce Development. *VEES 5 Employer Follow-Up Summary*, 1997 Report. Raleigh, NC: NCDPI, 1997.

Public Schools of North Carolina, Instructional and Accountability Services, Division of Workforce Development. *VEES 5 Employer Follow-Up Summary*, 1999 Report. Raleigh, NC: NCDPI, 1999.

Workforce development courses are offered in eight program areas, with each area having school-based and work-based learning opportunities: Agricultural Education, Business Education, Career Development, Family and Consumer Sciences Education, Health Occupations Education, Marketing Education, Technology Education, and Trade and Industrial Education. Students must complete at least five courses in a program area in order to be a vocational "concentrator" or graduate.

More than 13,000 employers completed a survey on the qualifications and performance of their employees who completed a vocational education program in the NC Public Schools. Employers compare vocational education graduates to other new employees of approximately the same age. An average of responses to fourteen survey questions is included in the *First in America* reports.

EVERY SCHOOL ACCOUNTABLE FOR STUDENT LEARNING

External evaluations of standards, assessment, and accountability system

***Education Week* evaluation**

Education Week. *Quality Counts 1999: Rewarding Results, Punishing Failure.* Bethesda, MD: Education Week, 1999.

Education Week. *Quality Counts 2000: Who Should Teach?* Bethesda, MD: Education Week, 2000.

Education Week awards grades to 50 states based on the quality of their systems of Standards, Assessments, and Accountability. A grade is awarded to each state on:

(1) the American Federation of Teachers' (AFT) evaluation of the clarity and specificity of their standards and assessments,
(2) the state's public accountability reports,
(3) the state's system of rewards and sanctions for schools or districts,
(4) the state's rating systems for school performance,
(5) assistance provided to low-performing schools, and
(6) the state's high school exit exams.

***Fordham Foundation* evaluation**

Finn, Jr., Chester E., Michael J. Petrilli, and Gregg Vanourek. *The State of State Standards.* Washington, DC: Thomas B. Fordham Foundation, 1998.

Finn, Jr., Chester E. and Michael J. Petrilli. *The State of State Standards.* Washington, DC: Thomas B. Fordham Foundation, 1999.

The Thomas B. Fordham Foundation evaluates academic standards in 49 states on the basis of their organization, disciplinary coverage, quality, clarity, comprehensiveness and rigor. The foundation reviews state standards in the five core academic subjects of English, history, geography, math, and science. A panel of experts is compiled to develop criteria and evaluate state standards in each subject area.

Number and percentage of schools receiving each ABCs designation

Public Schools of North Carolina, Office of Instructional and Accountability Services, Division of Accountability Services, Reporting Section. *A Report Card for the ABC's of Public Education, Volume I.* Raleigh, NC: NCDPI, 1998-1999.

Public Schools of North Carolina, Office of Instructional and Accountability Services, Division of Accountability Services, Reporting Section. *A Report Card for the ABC's of Public Education, Volume I.* Raleigh, NC: NCDPI, 1999-2000.

In 1998-99, the Public Schools of North Carolina implemented a comprehensive ABCs model for elementary, middle, and high schools. In 1999-2000 this model was implemented again, augmented by a new policy for participation of alternative schools, Department of Health and Human Services schools and Office of Juvenile Justice schools.

The ABCs accountability program sets growth/gain and performance standards for each elementary, middle, and high school in the state. End-of-Grade (EOG) and End-of-Course (EOC) test results and selected other components are used to measure the schools' growth/gain and performance. Schools that attain the standards are eligible for incentive awards or other recognition. To be eligible for incentive awards, schools also must have low exemption rates, testing at least 98 percent of their eligible students in K-8, and at least 95 percent of students enrolled in specific courses or grades in high school. Schools where growth/gain and performance fall below specified levels are designated as low-performing.

Schools are classified into several categories for the purpose of awarding incentives and recognition. The *First in America* reports include the number and percentage of schools that are designated as Schools of Excellence, Schools of Distinction, and Low Performing Schools on the basis of their performance on the ABCs program.

Schools of Excellence: A School of Excellence is a school that made expected growth/gain and had at least 90 percent of its students performing at or above Achievement Level III. Such schools are recognized at a statewide event and receive incentive awards.
Schools of Distinction: A School of Distinction is a school that had at least 80 percent of its students performing at or above Achievement Level III irrespective of growth or gain (but does not qualify as a School of Excellence).
Low Performing Schools: Low-Performing Schools are those that fail to meet their expected growth/gain standard and have significantly less than 50% of their students performing at or above Achievement Level III.

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Every Child Ready to Learn

More than ten years ago, the National Education Goals Panel focused the nation's attention on the importance of ensuring that every child begin school ready to learn.[1] Today, a growing body of research recognizes the vital, long-term effects of early childhood education on later development and school success.

Guaranteeing that every child has access to quality child care is one of the first and most important steps to ensuring that all of North Carolina's children are ready to learn.[2] High quality child care programs — programs characterized by small classes, safe and enriching environments, well-trained teachers, involved families, quality health care, and low teacher turnover — can clearly contribute to children's success in school. Good early education is linked to school achievement and the development of critical social skills that allow a child to grow into a happy, productive adult. Further, research reveals that children who are at risk of not doing well in school may receive even greater and more sustained benefits from high quality early education.[3]

But high quality child care alone will not ensure that all of North Carolina's children arrive ready to succeed in school. How ready children are to succeed in school also depends on support from their family.[4] Every parent must be a good first teacher. As a 1997 National Education Goals Panel report concludes, "If we do not simultaneously increase the educational levels and reading skills of parents, then we cannot possibly hope to improve the school readiness of children."[5] Parents cannot fulfill their role as their child's "first and most essential teacher" if they do not have the literacy skills to read aloud to their children, tell them stories, and instill in them a love of reading and learning.[6]

Every child should be ready to begin school. This year, more than 100,000 children began kindergarten in North Carolina's public schools.[7] They came to school with a wide range of skills and abilities. Good information about their abilities can guide efforts to improve early childhood education. Schools also need good information about the condition of North Carolina's kindergartners in order to ensure that they are ready for all of the children they serve.

North Carolina has made a considerable investment in improving the lives of its young children. This investment is evident in the grade of B- (83%) awarded in this goal area. If we assigned grades for the priorities within the goal, North Carolina would earn a B+ (88%) for its efforts to provide quality child care. This score is attributable, in large part, to improvements in child care, family involvement, and access to health screenings in Smart Start counties. North Carolina would earn a C (76%) on measures of family support for their children's learning, pulling down the overall grade in this goal area. Finally, North Carolina would earn a grade of B (84%) on measures of the condition of its children as they begin school and measures of our schools' readiness for the children they serve.

EVERY CHILD READY TO LEARN

TARGETS | INDICATORS | SCORES, CHANGE, AND RANK

Change: ⬆ North Carolina's score was significantly better. / ⬇ North Carolina's score was significantly worse. / ⬌ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY CHILD WITH ACCESS TO QUALITY CHILD CARE

- NC will provide high quality child care, encourage family support for children's learning, and facilitate access to health resources for all children.

Smart Start Indicators (19 Pioneer Counties)

Child care improvements

CHILD-TO-TEACHER RATIO:*

	LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:
INFANTS	4-to-1	4-to-1	⬌
TODDLERS	6-to-1	6-to-1	⬌
PRE-SCHOOLERS	9-to-1	9-to-1	⬌

CHILD CARE TEACHERS WITH SOME COLLEGE OR COMMUNITY COLLEGE COURSEWORK:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:
77%	59%	⬆

Family support for children's learning

% OF FAMILIES WHO ENGAGED IN EDUCATIONALLY IMPORTANT ACTIVITIES WITH THEIR CHILD:

	LATEST NC SCORE:	US AVERAGE:
READ TO A CHILD	91%	90%
TOLD A STORY	79%	75%
TAUGHT LETTERS, WORDS, NUMBERS	82%	88%

Health resources provided

% OF CHILD CARE CENTERS PROVIDING HEALTH SCREENINGS:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:
74%	59%	⬆

Child care worker average salary

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
$6.77/hr	$6.69/hr	⬆	Tied for 26th	$7.13/hr	$7.56/hr	$9.95 (DC)

Ratings of child care programs in NC

% OF LICENSED DAY CARE CENTERS RECEIVING EACH STAR RATING:

☆☆	☆☆☆	☆☆☆☆	☆☆☆☆☆	TOTAL of 3 TO 5 STARS
6%	59%	24%	11%	94%

LEGEND

- * — *On this indicator a lower score is better, a higher score is worse.*
- **Latest NC Score:** *This is the average score for North Carolina taken from the most recent data collection available. Most recent data collection dates range from 1990 to 2000.*
- **Prior NC Score:** *This is the average score for North Carolina taken from the preceding data collection.*
- **Change:** *Change arrows show North Carolina's progress from the last data collection to the most recent data collection.*
  - ⬆ *North Carolina's score is significantly better.*
  - ⬇ *North Carolina's score is significantly worse.*
  - ⬌ *Interpret North Carolina's score with caution — change is not significant.*
- **NC Rank:** *North Carolina's rank among states for which data are available. States are ranked from best to worst.*
- **U.S. Average:** *This is the average score for the United States taken from the most recent data collection available.*
- **Target Score:** *This is the score North Carolina currently needs to achieve to reach the First in America target.*
- **First:** *The score and state abbreviation is listed for the state receiving the best reported score.*

EVERY CHILD WITH ACCESS TO QUALITY CHILD CARE

The demand for early childhood care and education is growing dramatically in North Carolina and the nation. Nonparental child care is now the norm for young children in the United States. A recent report, *Child Care Quality: Does It Matter and Does It Need to Be Improved?*, noted that, "Sixty percent of children five years or younger are in child care on a regular basis, and 44% of infants are in child care for more than thirty hours a week."[8] Last year in North Carolina, more than 213,000 children were enrolled in regulated child care centers and homes.[9]

Research confirms that the quality of child care these children receive affects their health and development while they are in child care and their readiness for school in the future. Children who attend higher quality child care centers perform better on measures of cognitive skills (for example, math and reading) and social skills (for example, cooperating with teachers and peers) in child care and throughout their transition into school.[10]

How do children's experiences at ages three and four alter the course of a child's school career 5, 10, and 15 years later? One explanation is that "early childhood education improves children's ability to think and reason as they enter school, enabling them to learn more in the early grades. Their learning accumulates and their academic success keeps them 'on track' toward high school graduation."[11] Another is that early childhood success increases children's motivation and their parents' and teachers' expectations for their success in school. As parents and teachers encourage

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their learning, children gain confidence and remain oriented toward school achievement.[12] Both explanations highlight the important role that a high quality early childhood education can play in the school readiness and academic success of children.

High quality child care programs are characterized by: (1) low ratios of children to teachers, (2) well-trained teachers who receive the continual development and support necessary to provide an engaging and appropriate curriculum, (3) involved and supportive parents, (4) attention to the health and development of children, and (5) low rates of teacher turnover. The *First in America* reports measure many of these characteristics in order to evaluate whether North Carolina's children have access to high quality child care.

By the standards set in the targets for providing access to quality child care, North Carolina is performing well. The state is 88% of the way to its targets for this priority. If we assigned grades for performance on the priorities, North Carolina would receive a B+ on these measures. The contributions of Smart Start to improving child care, encouraging family involvement, and providing access to health screenings boost the priority score, while high child-to-teacher ratios in child care programs and low rates of adult literacy lower it.

NC will provide high quality child care, encourage family support for children's learning, and facilitate access to health resources for all children.

SMART START INDICATORS: CHILD CARE IMPROVEMENTS, FAMILY SUPPORT FOR CHILDREN'S LEARNING, AND HEALTH RESOURCES PROVIDED

Only early childhood interventions of the highest quality have substantial long-term positive effects on children's lives. A *Future of Children* report entitled, "Long-Term Outcomes of Early Childhood Programs," confirms that high quality "intervention programs have led to enhanced school achievement, higher earnings, and decreased involvement with the criminal justice system. Appropriately designed programs have helped parents strengthen their parenting skills and move toward economic self-sufficiency."[13] The most effective programs create a comprehensive web of support to improve all aspects of a child's life — their child care, family support, and health.[14]

In 1993, North Carolina created the Smart Start early childhood initiative to provide this web of support for all of the state's children. The goal of Smart Start is to ensure that all children enter school healthy and prepared to succeed. The program began in 12 Smart Start partnerships, serving nineteen North Carolina counties, and has expanded to serve children and families in all 100 counties. Smart Start operates through community partnerships that involve state government, local leaders, service providers, and families in examining their community's needs and designing interventions to meet those needs. Community partnerships focus their attention on three areas of intervention: improving child care, encouraging family support for children's learning, and making good health care accessible to all children.[15]

CHILD CARE IMPROVEMENTS

A significant portion of Smart Start funds are spent on improving child care quality. All local Smart Start partnerships fund projects to improve the quality of early childhood care and education in their communities. Partnerships enhance training for child care workers, provide funding for equipment and materials, and create incentives for centers to meet higher licensing and accreditation standards.[16] Two measures of Smart Start's effectiveness are its impact on child-to-staff ratios and teacher education and training.

The Frank Porter Graham Child Development Center at the University of North Carolina at Chapel Hill conducts independent evaluations of the North Carolina Smart Start Initiative. In 1994, 1996, and 1999 the Smart Start Evaluation team collected information on improvements in child care quality in the twelve pioneer Smart Start partnerships which served 19 North Carolina counties.[17] The *First in America* reports include data from these evaluations.

Child-to-teacher ratios*

The *Cost, Quality and Child Outcomes in Child Care Centers* study found that centers with low child-to-teacher ratios consistently provided higher quality care.[18] These programs were more likely to provide care that suits children's level of development and to foster closer relationships between children and caregivers. As late as second grade, children with closer relationships with their child care teachers continued to exhibit significantly better

Both child development theory and research on successful practices point to five key features of high-quality early care and education programs

1. Low child-to-staff ratios and small group sizes
2. Adequate teacher education and training
3. Family involvement
4. Low staff turnover
5. Child-initiated, active learning

Source: Start Early, Finish Strong: How to Help Every Child Become a Reader — July 1999

language, math, attention, and problem solving skills than their peers.[19] High ratios of children to adults lower the quality of child care; low quality child care leads to more problem behaviors, lower cognitive and language ability, and lower school readiness scores.[20] For this reason, the National Association for the Education of Young Children (NAEYC) recommends that states adhere to stringent child-to-teacher ratios.[21]

AGE OF CHILDREN	NAEYC RECOMMENDED CHILD-TO-TEACHER RATIOS	NC REQUIRED CHILD-TO-TEACHER RATIOS
Infants (Birth to 12 months)	3:1	5:1
Toddlers (12-24 months)	3:1 to 5:1	6:1
24 to 36 months	4:1 to 7:1	10:1
Three Year Olds	7:1 to 10:1	15:1
Four Year Olds	8:1 to 10:1	20:1

Source: NAEYC and NC DHHS

North Carolina's child-to-teacher ratios in Smart Start counties did not change between May, 1996 and 1999. Ratios remained at 4:1 in infant classes, 6:1 in toddler classes, and 9:1 in preschool classes. In all three categories for which data are available, North Carolina ratios failed to meet the recommendations of the NAEYC.[22] Through 1999, Smart Start interventions had not improved child-to-teacher ratios in North Carolina.

North Carolina's child-to-teacher ratios are worse than the ratios that most studies deem necessary for high-quality programs. The state's performance on this measure will likely require changes to existing regulations or additional incentives for programs that voluntarily lower ratios.

Teachers with some college or community college education

Numerous studies have confirmed that a well-trained caregiver is one of the most important elements of quality child care.[23] Well-trained caregivers — those with more formal education and specialized early childhood training — generally provide more appropriate care for children.[24] Even modest increases in high-quality training can benefit children.[25] Well-trained teachers are more likely to possess the myriad skills required to meet the needs of a challenging and diverse group of young children. They are better able to select the materials, activities, and interactions that contribute most strongly to children's language and math development. They are more likely to be attentive to and respectful of children's individual needs. They are more likely to be culturally sensitive and accepting of differences in ethnic backgrounds and customs. Researchers for *Parents* magazine also note that they are more likely to "discipline children in positive ways, teaching social skills, instead of blaming, criticizing, or punishing."[26] These important practices improve the quality of the state's child care and child preparedness for school.

In 1996, 59% of early childhood teachers in the twelve pioneer Smart Start partnerships had some college or community college coursework. By 1999, 77% of teachers had completed some college or community college. If improvement on this measure continues at the current rate, it will be possible for North Carolina to reach the *First in America* target of 90% by 2010.

FAMILY SUPPORT FOR CHILDREN'S LEARNING

How ready children are to learn and to achieve in school also depends on support from their families.[27] Research solidly confirms common sense: family involvement in children's learning improves their performance in school and helps keep them there. Early, regular reading is one of the most important things families can do to improve their child's readiness for school. Families who read aloud to their children, tell them stories, and involve them in active conversation are helping their children to develop the early language and communication skills that will prepare them to succeed in kindergarten.[28] One of Smart Start's main goals is to help families become better teachers. Smart Start supports programs that teach parenting skills, encourage reading to children, provide information about community resources, support parents through difficult times, and promote parental involvement.[29]

Perhaps as a result of these efforts, families participating in Smart Start engaged in educationally important activities with their child as often as or more often than a national sample of parents of preschoolers. This was true even though the Smart Start sample had a larger number of low income parents (66%) than the national sample (54%). Historically, low income parents have been less likely to report engaging in educational activities with their children.

On average, 84% of the families surveyed by Smart Start read to their children, told them stories, or helped them to learn letters, words, or numbers. This places North Carolina six points below the *First in America* target of 90% participation. Families who participated in the survey were involved in at least one Smart Start funded program and

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may have been encouraged to engage in these educational activities. It appears that many Smart Start families are getting the message that they play a vital role in the early education of their children.

HEALTH RESOURCES PROVIDED

Unhealthy children suffer "cognitive and social deficits, low scores on developmental and achievement tests, and inattentiveness" that make it difficult for them to meet the challenges of growing and learning.[9] Of North Carolina's entering kindergarteners, 7% failed a hearing test, 7% failed a vision test, and 25% had at least one identified health problem. More than 60% of kindergarteners with speech problems — the most commonly identified developmental problem — had not been referred for treatment prior to entering school.[10] Failure to identify and treat health problems places these children at risk for academic trouble before they enter school.

In 1996, 59% of child care centers in the 19 pioneer Smart Start counties offered health screenings to the children they served. By 1999, 74% of centers offered health screenings — a more than 25% increase in two years. The centers surveyed offered vision, hearing, dental, speech, and developmental screenings. With the assistance of child care providers, Smart Start partnerships provided more than 100,000 health screenings and services in 1997, and this number continues to rise.[11] If improvement on this measure continues at the current rate across all counties, it will be possible for North Carolina to reach the *First in America* target of 90% by 2010.

CHILD CARE WORKER AVERAGE SALARIES

Children enrolled in programs with high staff turnover are more vulnerable to impairment in the development of their social and communication skills.[12] In part, this is because constant turnover reduces the likelihood that children will develop the close and trusting relationships with their caregiver that promote healthy development. High rates of teacher turnover also lower the overall quality of child care by forcing programs to hire teachers with less education and experience.[13] Adequate compensation for child care teachers is crucial to decreasing turnover rates. Across the nation, salaries are so low that trained teachers leave at alarmingly high rates.[14]

Child care workers are among the lowest paid of all workers in the United States. Typically, child care teachers in the United States earn between $13,000 and $18,000 per year.[15] The *National Child Care Staffing Study* found that child care center teaching staff earn annual wages less than one-half of those paid to comparably educated women in other professions and less than one-third of those of comparably educated men.[17]

Nationally, child care teacher turnover rates are as high as 50% each year. In North Carolina, 32% of child care teachers left their positions during the last year for which data are available.[18] Child care teachers say that they leave the profession because of their dissatisfaction with the long hours, low pay and benefits, and stressful conditions.[19]

North Carolina's child care teacher salaries remain roughly at the national average. North Carolina's child care teachers currently earn an average annual salary of $14,070.[20] At an hourly rate of $6.77, North Carolina ranks 26th in the nation, tied with Virginia and Missouri. North Carolina's salary rate is below the national average of $7.13 and significantly lower than the national leader, Washington, D.C., with an hourly rate of $9.95. In order to achieve the *First in America* target of being among the top ten states in the nation, North Carolina currently needs to increase its rate by $.78 per hour.

North Carolina has made a substantial investment in scholarships to child care teachers seeking additional education and training, in incentives to child care programs employing better trained caregivers, and in efforts to attract and retain high quality caregivers. The state will not reap the rewards of its investment if child care teachers continue to leave the profession for better wages, benefits, and working conditions.

Related Information and Perspectives

Because child care teacher salaries reported above are not adjusted for cost-of-living differences, state-to-state comparisons are imprecise. Adjusted salary figures allow us to equate salaries in different states because they take into account the relative purchasing power of a dollar in each state.[21] For instance, the adjusted hourly rate in Washington, D.C. is $8.06 per hour (down from an unadjusted rate of $9.95/hour), reflecting the higher costs of rent, food and other basic costs of living in the area. When adjusted, North Carolina's average salary rate rises to $7.37 (from an unadjusted rate of $6.77/hour), reflecting our lower costs. When cost-of-living adjustments are applied, North Carolina ranks 14th in the nation and just $.09 below an adjusted target of $7.46 per hour.

RATINGS OF CHILD CARE PROGRAMS IN NC

All regulated child care programs in North Carolina will receive a rated license.

Child care must be regulated whenever it involves:

- three or more unrelated children
- under 13 years of age
- receiving care from a non-relative
- on a regular basis, of at least once a week for more than four hours per day but less than 24 hours.

Source: NC DHHS

Kindergarten teachers tell us that, "If America is really serious about school readiness, quality child care must become a priority...." Yet, in *Not by Chance: Creating an Early Care and Education System*, Kagan and Cohen report that for "every 10 center-based programs, two provide high-quality care, seven provide mediocre care, and one jeopardizes the health and safety of children."[8] Monitoring the quality of child care programs is an important first step in improving the quality of early childhood care.

In 1999, the North Carolina Department of Health and Human Services adopted a new five-star child care rating system for all regulated child care facilities. The five-star system informs families about the quality of their child care program, the experience and education of their children's teachers, and their program's compliance with the law.[9] One star indicates that the program meets minimal state requirements in health and safety. Licenses with 2-5 stars represent higher levels of quality, with five stars signaling to parents that the center offers the highest level of quality care available.

Program standards

Program standards monitor how children are cared for — how they are treated by their caregivers, the activities planned for them, the number of toys available, how they are fed, how clean and comfortable the classrooms are, and whether good health practices are employed by the staff. Evaluators utilize the Early Childhood Environmental Rating Scales developed by the Frank Porter Graham Child Development Center at UNC-CH to measure the quality of the child care environment.[9]

Education standards

A child care program can also increase the number of stars it earns by improving the education and training of its director and staff or by providing staff members the opportunity to gain their Early Childhood Certification at a local community college.[9] Research confirms that better educated and trained workers actually do a better job with children. Further, children whose caregivers are better qualified have been shown to perform better academically and behaviorally at least into early elementary school.[9]

Compliance history

Child care programs also receive points based on their history of compliance with North Carolina child care regulations. Programs lose points if they violate child care regulations, such as staff age and education requirements, maximum child-to-teacher ratios, health and safety measures, and discipline procedures.

Applications for the star ratings process were due on September 1, 2000. All child care programs that chose not to apply were awarded a one star license, certifying only that they have met the minimum standards required for state licensure. As of September 25, 2000, 1216 programs had completed the application process and were awarded between two and five stars. A substantial number of applications were submitted immediately prior to the September 1, 2000 deadline. Many of those programs are currently undergoing evaluation by the Department of Health and Human Services and are not included in the reported data.

The *First in America* target on this measure is to have 90% of applicants receive between three and five stars. Ninety-four percent (94%) of the initial applicants have met this standard. As more applicants complete the rating process and more programs elect to participate, this percentage may change substantially.

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK

Changes: ↑ North Carolina's score was significantly better. / ↓ North Carolina's score was significantly worse. / ↔ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY PARENT A GOOD FIRST TEACHER

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK
• NC will be one of the nation's top 10 states in adult literacy and home support for literacy.	Adult literacy rate	LATEST NC SCORE: 50% · PRIOR NC SCORE: N/A · CHANGE: N/A · NC RANK: Tied for 39th · US AVERAGE: 56% · TARGET SCORE: 68% · POINT: 76% (4th)
	Home environment support for literacy	% OF 4TH GRADERS REPORTING PRESENCE OF LITERACY MATERIALS AT HOME: LATEST NC SCORE: 72% · PRIOR NC SCORE: 72% · CHANGE: ↔ · NC RANK: Tied for 22nd · US AVERAGE: 86% · TARGET SCORE: 76% · POINT: 80% (CT)
		% OF 8TH GRADERS REPORTING PRESENCE OF LITERACY MATERIALS AT HOME: LATEST NC SCORE: 81% · PRIOR NC SCORE: 81% · CHANGE: ↔ · NC RANK: Tied for 16th · US AVERAGE: 86% · TARGET SCORE: 93% · POINT: 86% (CT)
		% OF 4TH GRADERS SPENDING 5 OR MORE HOURS WATCHING TV DAILY:* LATEST NC SCORE: 28% · PRIOR NC SCORE: 29% · CHANGE: ↔ · NC RANK: Tied for 30th · US AVERAGE: 25% · TARGET SCORE: 17% · POINT: 14% (MD, VT)
		% OF 8TH GRADERS SPENDING 5 OR MORE HOURS WATCHING TV DAILY:* LATEST NC SCORE: 24% · PRIOR NC SCORE: 29% · CHANGE: ↑ · NC RANK: Tied for 23rd · US AVERAGE: 23% · TARGET SCORE: 14% · POINT: 8% (UT)

EVERY PARENT A GOOD FIRST TEACHER

Reading is one of the keys to school learning, and good early experiences with reading prepare children to learn how to read.[1] Children rely on their parents and families, their first and most essential teachers, to read to and with them, to make books and reading materials available to them in their home, and to limit their television viewing. In this environment, children can begin to develop the skills that will enable them to succeed in school.

North Carolina is 76% of the way to its targets for this priority. If we assigned grades for performance on the priorities, North Carolina would receive a C on measures of adult literacy and family support for their children's learning. North Carolina's families score high marks for providing their children with access to a variety of literacy materials in their homes. But, in order to improve its performance on this priority and the overall goal, North Carolina must increase the rate of adult literacy and decrease the amount of time children spend watching television.

NC will be one of the nation's top 10 states in adult literacy and home support for literacy.

ADULT LITERACY RATE

Many experts contend that we will not improve children's literacy rates and school readiness unless we first raise the literacy skills of parents. Parents cannot fulfill the role of good first teacher without the literacy skills to read aloud to their children, tell them stories, and actively engage them in thinking and learning.[2]

The *National Literacy Act of 1991* declared that "every individual should have the literacy skills to be able to read, write, and speak in English and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals, and to develop one's knowledge and potential."[3] The National Assessment of Adult Literacy (NAAL) was designed to determine whether America's adults meet this standard.[4] The assessment measures three types of literacy: prose, document, and quantitative. Each of the literacy scales has five levels, with 1 being least proficient and level 5 being most proficient.

Here we report the percentage of adults at level 3, or adequate proficiency, on the prose literacy scale. Prose literacy encompasses the knowledge and skills needed to understand and use information from text. Adults who score at level 3 or above are able to locate, comprehend, explain, and write about information from text. We focus on prose literacy because children benefit most from reading with parents who are able to quickly understand a text, explain and discuss its meaning, and tie the text to the child's previous experiences.[5] These abilities are best measured on the prose literacy scale.

Fifty percent (50%) of adults in North Carolina scored at level 3 or above on the NAAL prose literacy assessment. North Carolina is ranked 39th in the nation. Alaska led all states with a prose literacy rate of 76%, while Washington, DC was ranked last with a rate of 35%. The national average on this measure was 56%. In order to achieve the current

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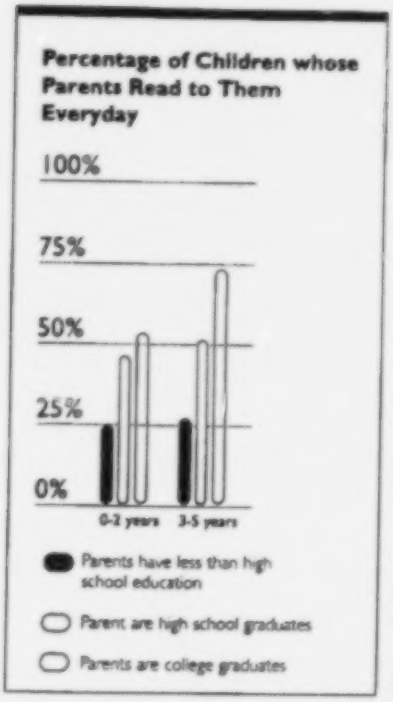

First in America target, North Carolina needs to raise its prose literacy rate by eighteen percentage points, or about two points per year over the next decade.

Related Information and Perspectives

Daily reading with children can have a dramatic effect on their long-term achievement. Yet nationally, only 45% of all children aged 2 and younger and 56% of all 3-to-5-year-olds were read to daily by parents or other family members.[5] Parents who are college graduates report that they read to their preschool-aged children at more than twice the rate of parents with less than a high school education.[6] For this reason, the National Education Goals Panel argues that improving children's literacy will require states to focus more attention on the educational attainment of parents.

HOME ENVIRONMENT SUPPORT FOR LITERACY

Children continue to develop and enrich their literacy skills long after they finish kindergarten. Research confirms that by making reading materials available to children in their home and by limiting the time that children spend watching television, parents can improve their children's ongoing preparation for and learning in school. Such efforts are especially effective with students who are struggling in school.[8]

In their 1994, 1996, and 1998 assessments, the National Assessment of Educational Progress (NAEP) sought to test the relationship between students' access to home literacy materials — magazines, newspapers, encyclopedias, and at least 25 books — and their reading achievement.[9] Across the nation, students who reported having more types of literacy materials in their homes also had higher average scores on NAEP reading assessments.

In 1998, seventy-two percent of North Carolina's fourth graders and 81% of the state's eighth graders reported having access to literacy materials in their homes. These scores placed North Carolina's students in the middle of the pack, with 4th graders ranked 22nd and 8th graders ranked 18th. North Carolina must increase access to literacy materials by four percentage points for 4th graders and two percentage points for 8th graders to reach the current *First in America* targets. Given that North Carolina's scores did not change between 1994 and 1998, this task may be more difficult than it would appear at first glance.

Many studies have indicated an inverse relationship between excessive television viewing and reading achievement.[8] Students who reported watching at least four hours of television daily scored lower on NAEP assessments than students who watched less television."[9] Similarly, the North Carolina Department of Public Instruction has found that students who watch only two hours of television per day outscore all other students on the North Carolina End-of-Grade exams.[8]

In 1998, twenty-eight percent (28%) of fourth graders in North Carolina reported watching five or more hours of television daily. This percentage did not change significantly from 1994. The state's fourth graders ranked 30th in the nation, far worse than the current *First in America* target of 17% and the national average of 25%.

Eighth grade students fared better. Only 24% reported watching more than five hours of television daily, a five percentage point improvement since 1996. North Carolina scored only a little worse than the national average of 23%, but scored ten percentage points worse than the current *First in America* target of 14%. Utah led the nation with only 8% of eighth grade students in the state watching five or more hours of television daily.

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK		
Changes: ↑ North Carolina's score was significantly better / ↓ North Carolina's score was significantly worse. / ↔ Interprets North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.				
EVERY CHILD READY TO BEGIN SCHOOL				
• NC kindergartners will arrive ready to succeed in school and NC schools will be ready to meet their needs	NC kindergartners' readiness scores		LATEST NC SCORE	NC AVERAGE/TARGET SCORE
		HEALTH STATUS	84%	83%
		SOCIAL DEVELOPMENT	99	100
		APPROACHES TOWARD LEARNING	82%	85%
		LANGUAGE DEVELOPMENT	97	100
		MATH DEVELOPMENT	96	100
	NC schools' readiness for kindergartners		LATEST NC SCORE	TARGET SCORE
		AVERAGE KINDERGARTEN CLASS SIZE*	21	18
		KINDERGARTEN TEACHERS WITH EARLY CHILDHOOD LICENSURE	9%	90%

EVERY CHILD READY TO BEGIN SCHOOL

Children's success in school hinges on a range of factors, including their health and physical development, their social and emotional development, their approaches to learning, their language and communication skills, and their general knowledge. Information about the condition of children when they begin school can guide early childhood educators' efforts to prepare them for school and schools' efforts to be ready for them.

In this section, we report selected results from the *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment* conducted by the Frank Porter Graham Child Development Center at the University of North Carolina at Chapel Hill. The Assessment measures kindergartners' readiness to succeed in school and schools' readiness to meet their needs. If we awarded a grade in this priority area, North Carolina would earn a B (84%) for its efforts to ensure that *Every Child is Ready to Begin School*.

NC kindergartners will arrive ready to succeed in school and NC schools will be ready to meet their needs.

NC KINDERGARTNERS' READINESS SCORES

North Carolinians want and need good information on the readiness of young children. Yet young children are notoriously difficult to assess accurately.[39] In part, according to a Smart Start report, "this is because school readiness is not just awareness of numbers or letters. It is health, good motor skills, social skills, and language development. It is curiosity, the capacity to share with other children, and respect adults."[40] These skills cannot be readily assessed by traditional standardized paper-and-pencil, multiple-choice achievement tests.[41] Further, children may vary a great deal, with "normally developing children growing in different ways and at different paces."[42]

Many national organizations have raised concerns about the use of traditional methods of evaluating readiness and have called for more accurate assessments. They recommend that decisions be based on multiple sources of information — observations, assessments, and discussions with parents and caregivers. Such assessments are neither quick, nor easy, nor cheap.[43]

In light of these difficulties, the Governor and Superintendent of Public Instruction asked a Ready for School Goal Team, assembled by the North Carolina School Improvement Panel, to advise the state on the most effective and appropriate way to measure and promote children's school readiness. The Goal Team developed a definition of school readiness, identified a system to assess school readiness, and identified the key elements necessary for schools to be prepared to teach the full range of children who enter kindergarten. Forty members of the Ready for School Goal Team, representing North Carolina's early childhood community, K-12 community, and higher education, took the following steps to accomplish this task:

- reviewed existing research on the definition of school readiness,
- conducted a 50 state survey to determine what, if any, readiness definitions and assessments were currently in use,
- reviewed existing local, state, and national assessment instruments,

- consulted early childhood and public school representatives, and
- convened a panel of national readiness experts to advise them.

On the basis of their fact-finding, the Goal Team issued a definition of school readiness that includes five key components of a child's development: health and physical development, social and emotional development, approaches toward learning, language development and communication, and cognition and general knowledge.

The Goal Team then selected a set of assessment instruments to measure components of each domain of child development. The instruments included in the resulting *North Carolina School Readiness Assessment* use information from parents, kindergarten teachers, and children to determine the condition of North Carolina's children as they enter school.

This year, the first *North Carolina School Readiness Assessment* was administered to a random statewide sample of entering kindergartners during their second month of school. Here we report only those measures that allow us to compare North Carolina's performance with that of the nation. Data from other individual states are not available on any of the readiness measures included in the assessment. Therefore, the *First in America* target for each measure is for North Carolina kindergartners to score at or above the national average.

Health status

Children's physical development and health affect their ability to succeed in school. For this reason, the *First in America* reports include parents' ratings of the health status of their kindergartners. A sample of North Carolina parents was asked to rate their child's health as poor, fair, good, very good, or excellent. Eighty-four percent (84%) of NC kindergartners were rated as having very good or excellent health. North Carolina has achieved the current *First in America* target on this measure, scoring just above the national average of 83%.

Social development

Children generally function more successfully in school if they feel good about themselves and are able to respect the rights of others, relate to their caregivers and peers, get along well in a group, and treat others as they would like to be treated.[4] The social and emotional maturity evidenced in these skills is an important part of a child's development and preparation for school.

The *School Readiness Assessment* asked kindergarten teachers to rate their students' social skills and problem behaviors. North Carolina kindergartners received an average score of 99 on ratings of their social development. This is just below the national average of 100 on this measure. Scores on this scale can range from 40 to 160, with most scores falling between 70 and 130. In North Carolina, the scores for individual children ranged from 63 to 123.

NC students performed well on this measure when compared to the current national average. As states continue to improve early childhood care and education, we may see an increase in the national average, and thus the target.

Measure of NC Kindergartners' Approaches Toward Learning

Percentage of kindergartners rated by their parents as "often" or "very often"

	LATEST NC SCORE	US AVERAGE
Eager to learn	91%	92%
Persistent at tasks	63%	73%
Creative in their work or play	91%	85%

Source: Fall 2000 Pilot Test of the North Carolina School Readiness Assessment, November 2000.

Approaches toward learning

Children's school success depends not simply on academic skills but also on motivation, learning styles, and attitudes. Children who are curious, attentive, confident, and creative are often more likely to engage in and enjoy learning. Their willingness to try new things is a valuable asset as they enter the unfamiliar world of kindergarten.

The parent survey conducted as a part of the *School Readiness Assessment* asked parents to assess to what degree their child is eager to learn new things, able to persist at tasks, and creative in their work or play. The *First in America* reports cite the average percentage of kindergartners whose parents responded that they often or very often exhibit these approaches toward learning. On average, 82% of North Carolina kindergartners and 83% of the nation's kindergartners met this standard. While NC children received high ratings for their eagerness (91%) and creativity (91%), only 63% were rated as often or very often able to persist at tasks — 10 percentage points below the current national average.

Language development

Communication skills help children to learn about and understand the world around them and to begin to develop the early literacy skills that will be an essential part of their early school success. According to the National Education Goals Panel report, *Getting a Good Start in School*, the level of a child's early language skills is a "key predictor of school success."[8]

NC kindergartners completed a language assessment designed to test their understanding of words. On average, they received a score of 97, compared to a national average score of 100. Scores on this scale can range from 40 to 160, with most scores falling between 70 and 130. In North Carolina, the scores for individual children ranged from 47 to 137.

While this difference is slight and the performance of NC students is promising, it may be more difficult than it would appear to exceed the national average. A significant effort is required to increase performance by even one point. We can also expect the national average, and thus the target, to rise as many states continue efforts to improve early childhood care and education.

Child care center students, NC Community College System

Math development

Children begin very early to acquire basic knowledge about themselves and the world around them. For instance, most children entering school know their name, have some knowledge of colors and shapes, and understand basic math concepts. By this age, children are beginning to acquire the knowledge and information that they will draw on in school.

While three assessment instruments are included in the North Carolina School Readiness Assessment to measure children's cognition and general knowledge, only the math assessment allows us to compare NC scores to the national average. The early math skills component assesses children's ability to do simple mathematical tasks, such as counting and identifying parts and wholes. NC kindergartners received an average score of 96 on this measure. Their performance was lower than the national average of 100. Scores on this scale can range from 40 to 160, with most scores falling between 70 and 130. In North Carolina, the scores for individual children ranged from 46 to 143.

North Carolina kindergartners scored well on a variety of measures of their readiness for school. While average scores were close to the national average on most measures, these averages conceal the wide range of scores for individual students. Especially on the language and math measures, many NC students posted disturbingly low scores. Overall, NC students' performance was strongest on measures of their health, social skills, eagerness to learn, creativity while learning, and language development. Improvement is needed in the areas of persistence at tasks and early math development.

NC SCHOOLS' READINESS FOR KINDERGARTNERS

Strengthening achievement requires not only getting children ready for school, but also getting schools ready for the particular children they serve.[9] Schools are responsible for successfully teaching all children who are old enough to begin kindergarten. Teachers and administrators must have the knowledge, resources, and information necessary to serve children with a broad range of skills.[9]

The Ready Schools piece of the *North Carolina School Readiness Assessment* monitors the capacity of North Carolina's schools to educate children entering kindergarten. As the School Readiness Goal Team observed, "ready schools understand the development of young children and seek information about each child's strengths, interests, needs, and social and cultural background. They are able to use this knowledge to design and implement appropriate, individualized instruction for all students."

Information about the readiness of North Carolina's schools was gathered from a statewide sample of teachers who were asked to provide information on their school's capacity to meet the needs of entering kindergartners. Two measures allow us to compare North Carolina's scores with those of the nation — average kindergarten class size and the percentage of kindergarten teachers with early childhood certification.

Average kindergarten class size*

Especially in the early grades, small class sizes can have an important and long-term impact on a child's achievement in school. (*For more information on class size, see Safe, Orderly, and Caring Schools, Every Student Known and Cared for, page 55.*) The National Association for the Education of Young Children (NAEYC) recommends kindergarten classes of 18 or fewer students. At this level, teachers are more likely to be able to provide the individual time and instruction that each student needs. The *First in America* reports adopt 18 as the target score for this measure. The average kindergarten class size in North Carolina is currently 21 students. Meeting this *First in America* target will be a challenge for the state. North Carolina would currently need approximately 800 additional kindergarten classes — an increase of almost 20% — to accommodate its current kindergarten enrollment in classes of 18 students.

Percentage of kindergarten teachers with early childhood licensure

The North Carolina Department of Public Instruction offers several types of licensure for kindergarten teachers — including birth to kindergarten (BK), pre-school add-on (an additional training component available for teachers already licensed in early childhood, elementary, or elementary special education), early childhood (covering grades kindergarten through fourth), and elementary (for grades kindergarten through sixth). While teachers with any of these certifications are fully licensed to teach kindergarten in NC, only those teachers with BK and pre-school add-on licensure have received extensive training on the distinctive developmental and educational characteristics of children from birth through age six. For this reason, the *First in America* target on this measure is for 90% of kindergarten teachers to receive BK or pre-school add-on licensure. Currently, only 9% of North Carolina's kindergarten teachers meet this rigorous standard.

One reason this percentage is so low is that the pre-school add-on licensure was established only recently, and few teachers have had a chance to earn it. From this standpoint, the score is artificially depressed. Yet specific preparation to teach kindergarten children is important to track, and over the next few years, this indicator will more accurately reflect the extent to which kindergarten teachers are well-prepared to teach children during their first and pivotal year of schooling.

By our measures, then, North Carolina schools are not yet fully ready to address the needs of the wide range of students entering them. While the state's current average class size in kindergarten seems close to the size recommended by early childhood educators (21 NC, 18 recommended), reaching the recommended size would entail a very considerable investment. And only about a tenth of kindergarten teachers have extensive training to work with children of kindergarten age.

B-

Every Child Ready to Learn: Summary of Performance

Measured against the targets for the goal, *Every Child Ready to Learn*, North Carolina currently earns a B- (83%). On the priority, *Every Child with Access to Quality Child Care*, performance is relatively strong on our Smart Start indicators, which measure improvements in child care, family support for children's learning, and the provision of health screenings. Those child care centers which have applied for review under the new five-star rating system have also scored well. Child-to-teacher ratios in child care centers are a weakness in this priority. If we gave grades on a priority basis, *Every Child with Access to Quality Child Care* would rate a B+ (88%).

Turning to *Every Parent a Good First Teacher*, many homes provide children with access to a variety of reading materials. But the state's low rate of adult literacy and high rates of excessive television viewing pull down performance here to 76%, which would translate into a C.

North Carolina's children seem about as ready to enter school as their counterparts around the nation. Their scores on most readiness measures approach or exceed the national average, though in certain specific areas, such as persistence on tasks, they do not score as well. The readiness of schools for children — the flip side of the readiness coin — is more of a mixed picture. Our kindergarten class size exceeds the recommended level by only three children. Yet reducing kindergarten class size to the recommended level would require a major investment in both classrooms and teachers. And we have a low rate of teachers with the most appropriate training and credentials for kindergarten (fewer than 10%). Thus on the priority, *Every Child Ready to Begin School*, the state would rate the equivalent of a B (84%).

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Data Sources and Notes for Every Child Ready to Learn

EVERY CHILD WITH ACCESS TO QUALITY CHILD CARE

Smart Start indicators

Child care improvements

University of North Carolina, Frank Porter Graham Child Development Center, Smart Start Evaluation Team. *Child Care in the Pioneer Partnerships 1994 and 1996*. Chapel Hill, NC: FPG, 1997.

Bernier, Kathleen. Email communication with Elizabeth Cunningham, 19 September 2000.

Harms, T. and R.M. Clifford. *Early Childhood Environment Rating Scale*. New York: Teachers College Press, 1980.

The Smart Start Evaluation Team at the Frank Porter Graham Child Development Center gathered information on improvements in the quality of child care in 1994, 1996 and 1999 in the 12 pioneer Smart Start partnerships covering 19 North Carolina counties — Burke, Caldwell, Cleveland, Cumberland, Davidson, Halifax, Warren, Hertford, Jones, Mecklenburg, Orange, Stanly, Cherokee, Clay, Graham, Haywood, Jackson, Macon, and Swain. The *First in America* reports will include information from across the state as it becomes available.

In the fall and winter of 1994-95, Smart Start researchers visited 184 child care centers in the first 12 Smart Start partnerships (22% of the 831 licensed centers in those counties). In 1996-97, 188 child care centers from the same counties were visited (19% of the 995 licensed centers). In 1999, evaluators returned to 135 of the centers. At each center, data collectors completed the Early Childhood Environment Rating Scale (ECERS) in one randomly selected preschool classroom. The ECERS is a well-established measure of child care quality that assesses seven general areas: personal care routines, furnishings and display for children, language-reasoning experiences, fine and gross motor activities, creative activities, social development, and adult needs. Data collectors also interviewed center directors to obtain information about center characteristics and services, including a checklist of 14 different Smart Start improvement activities the center or center staff might have participated in during the past year. The child care providers in the observed classrooms were asked to provide basic demographic information about themselves.

Child-to-teacher ratios were obtained through classroom observation and interviews with center directors. The level of education of child care teachers was one of the demographic questions asked of teachers during classroom observation.

Family Support for Children's Learning

University of North Carolina, Frank Porter Graham Child Development Center, Smart Start Evaluation Team. *Families and the North Carolina Smart Start Initiative*. Chapel Hill, NC: FPG, 1997.

University of North Carolina, Frank Porter Graham Child Development Center, Smart Start Evaluation Team. *North Carolina School Readiness Assessment Parents' Survey*. Chapel Hill, NC: FPG, 2000.

In 1997, the Smart Start Evaluation Team surveyed a sample of families who were involved in at least one Smart Start funded program. The survey included questions from the National Center for Education Statistics' *National Household Education Survey* (NHES) asking parents if they had engaged in a series of educational activities with their children during the previous week. The use of NHES questions allows researchers to compare the Smart Start results with the results of a national sample.

These survey items were again administered to a representative sample of Smart Start families in conjunction with the *2000 North Carolina School Readiness Assessment*.

The *First in America* reports include the percentage of parents who report that they read to their children, told their children a story, and helped their children to learn letters, words, or numbers during the previous week. A combined weighted average of these three activities is also reported.

Health Resources Provided

University of North Carolina, Frank Porter Graham Child Development Center, Smart Start Evaluation Team. *Child Care in the Pioneer Partnerships 1994 and 1996*. Chapel Hill, NC: FPG, 1997.

Bernier, Kathleen. Email communication with Elizabeth Cunningham, 19 September 2000.

See data note for Every Child Ready to Learn, EVERY CHILD WITH ACCESS TO QUALITY CHILD CARE, Smart Start indicators, Child care improvements.

The *First in America* reports monitor the provision of health screenings by child care centers in the Smart Start counties in 1996 and 1999. The Smart Start Evaluation Team asked child care center directors to report whether their centers provided vision, hearing, dental, speech and language, and developmental screenings. These percentages are combined and a weighted average is provided in the *First in America* reports.

Child care workers average salary

US Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics Division. *1997 State Occupational Employment and Wage Estimates*. Washington, DC: GPO, 1997.

US Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics Division. *1998 National Occupational Employment and Wage Estimates*. Washington, DC: GPO, 1998.

The Bureau of Labor Statistics (BLS) reports the median hourly, mean hourly, and annual wage for child care workers in each state and the nation. This information is obtained through the *Occupational Employment Statistics* (OES) survey, an annual mail survey measuring occupational employment and wage rates for wage and salary workers in non-farm establishments, by industry.

The survey samples approximately 400,000 establishments per year, taking 3 years to fully collect the full sample of 1.2 million establishments. The BLS produces wage and employment estimates for 750 occupations across all industries for the nation, each of the 50 states, the District of Columbia, and Metropolitan Statistical Areas.

The latest wage estimates are based on information from the 1996, 1997, and 1998 surveys. The 3 years of survey responses for employment and wage data have been combined to produce the 1998 results. The prior results were produced from the 1995, 1996, and 1997 wage surveys.

The *First in America* reports cite the mean hourly wage. The mean hourly wage is the estimated total wages of an occupation divided by its estimated total employment. Wages are straight-time, gross pay, exclusive of premium pay. Included are base rate, cost-of-living allowances, guaranteed pay, hazardous-duty pay, incentive pay including commissions and production bonuses, and on-call pay. Excluded are back pay, jury duty pay, overtime pay, severance pay, shift differentials, non-production bonuses, and tuition reimbursements.

Ratings of child care programs in NC

Percentage of licensed child care centers receiving each star rating

North Carolina Department of Health and Human Services, Division of Child Development, North Carolina Child Care Commission. *Revised Rated License Requirements for Centers*. Raleigh, NC: DHHS, 1999.

Carter, Anna, June Locklear, and Cindy Moore, North Carolina Department of Health and Human Services, Division of Child Development. Email and telephone communication with Elizabeth Cunningham, September and October 2000.

The North Carolina Child Care Commission requires all centers to obtain a state license when six or more children are cared for in a residence or when three or more children are cared for in a building other than a residence. Religious-sponsored programs and programs that operate for less than four months in a row are exempt from some regulations.

Beginning in the fall of 1999, a voluntary system of rated licenses for child care centers and family child care homes was introduced. Child care programs had the opportunity to submit an application by September 1, 2000 and undergo an evaluation by the Department of Health and Human Services. Programs that chose not to submit an application were awarded one star, indicating that they have met the minimum standards required for state licensure. Programs that submitted an application were awarded two-to-five stars based on the quality of their program standards, the education level of their staff, and the facility's history of compliance with child care regulations.

The *First in America* reports provide the number and percentage of total applicants that have currently received two-to-five star ratings. A substantial number of applications were submitted immediately prior to the September 1, 2000 deadline. Many of those programs are currently undergoing evaluation by the Department of Health and Human Services and are not included in the reported data. The reported data also excludes new programs that have been in existence less than six months. Under the star ratings system, new child care centers receive a temporary non-rated license and new family child care homes are automatically awarded one star until their first evaluation in their second year of operation.

EVERY PARENT A GOOD FIRST TEACHER

Adult literacy rate and home environment support for literacy

Adult literacy rate

Reder, S. *Synthetic Estimates of NAAL Literacy Proficiencies from 1990 Census Microdata*. Chicago, IL: Northwest Regional Educational Laboratory, 1994.

In 1990, the U.S. Department of Education and Educational Testing Service (ETS) designed and conducted the National Adult Literacy Survey (NAAL). NAAL scores characterize the literacy of America's adults in terms of three "literacy scales:" prose, document, and quantitative literacy. Each of the literacy scales has five levels, with 1 being least proficient and level 5 being most proficient. The *First in America* reports cite the number of adults at level 3, or adequate proficiency, on the prose literacy scales. Prose literacy is defined as the knowledge and skills needed to understand and use information from texts.

North Carolina and several other states did not request or pay for a sample of NAAL test takers large enough to generate a reliable estimate of state adult literacy rates. In order to provide literacy infor-

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mation for those states, the Northwest Regional Educational Laboratory prepared synthetic projections for each state based on population estimates and the NAAL scores of similar participating states.

Home support for literacy

U.S. Department of Education, National Center for Education Statistics, National Assessment of Education Progress. *NAEP Facts: Reading Proficiency and Home Support for Literacy.* Washington, DC: NCES, 1996.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Education Progress. 1996 Mathematics Assessment Student Summary Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Education Progress. 1998 Reading Assessment Student Summary Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

See data note for High Student Performance, EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS, Percentage of students scoring proficient or higher on NAEP assessment, NAEP grade 4 and 8 reading.

As part of the background questionnaire that is administered with NAEP assessments, students in 4th and 8th grade were asked whether four types of literacy materials are present in their home — magazines, newspapers, encyclopedias, and at least 25 books. Data from 41 states were included in the 4th grade indicator and data from 37 states were included in the 8th grade indicator.

EVERY CHILD READY TO BEGIN SCHOOL

NC kindergartners' readiness scores

Health status

University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center. *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment.* Chapel Hill, NC: FPG, 2000.

West, Jerry, Kristin Denton, and Elvie Germino-Hausken. *America's Kindergartners: Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99, Fall 1998*, NCES 2000-070. Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2000.

More technical information on the North Carolina data will be available in a separate North Carolina School Readiness Report from the Frank Porter Graham Child Development Center, UNC-CH, in early 2001.

North Carolina data were collected from a survey of a representative sample of NC parents that was part of the *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment.* Parents were asked to rate their kindergarten child's general health as poor, fair, good, very good, or excellent. The percentage of parents who rated their child's health as very good or excellent is included in the *First in America* reports.

National data about kindergartners' health was obtained from the U.S. Department of Education report.

Social development

University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center. *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment.* Chapel Hill, NC: FPG, 2000.

Gresham, F. M., and S.N. Elliott. *Social Skills Rating System*. Circle Pines, MN: American Guidance Service, 1990.

More technical information on the North Carolina data will be available in a separate North Carolina School Readiness Report from the Frank Porter Graham Child Development Center, UNC-CH, in early 2001.

Data about kindergartners' social skills were collected as part of the *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment.* A representative sample of NC kindergarten teachers completed the Social Skills Rating System. *First in America* reports the average standard score for a composite of the Social Skills and Problem Behavior scales. The average (mean) score nationally for this rating scale is 100 (standard deviation of 15).

Approaches toward learning

University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center. *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment.* Chapel Hill, NC: FPG, 2000.

West, Jerry, Kristin Denton, and Elvie Germino-Hausken. *America's Kindergartners: Findings from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99, Fall 1998*, NCES 2000-070. Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2000.

More technical information on the North Carolina data will be available in a separate North Carolina School Readiness Report from the Frank Porter Graham Child Development Center, UNC-CH, in early 2001.

North Carolina data about kindergartners' approaches toward learning were collected from a representative sample of NC parents surveyed in Fall, 2000. Parents were asked to indicate whether their kindergarten child never, sometimes, often, or very often:

Persists at tasks (keeps working even when things get hard).
Seems eager to learn new things.
Shows creativity in work and play.

The percentage of parents who rated their child as exhibiting each behavior often or very often is reported.

National data about kindergartners' task persistence and eagerness to learn was obtained from the U.S. Department of Education report.

Language development

University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center. *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment.* Chapel Hill, NC: FPG, 2000.

Dunn, L. M. and L.M. Dunn. *Peabody Picture Vocabulary Test-III Edition, Form A.* Circle Pines, MN: American Guidance Service 1997.

More technical information on the North Carolina data will be available in a separate North Carolina School Readiness Report from the Frank Porter Graham Child Development Center, UNC-CH, in early 2001.

A representative sample of NC kindergarten children completed the *Peabody Picture Vocabulary Test-III Edition (PPVT-III), Form A. First in America* reports the average PPVT-III standard score. The average (mean) score nationally for this measure is 100 (standard deviation of 15).

Math development

University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center. *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment.* Chapel Hill, NC: FPG, 2000.

Woodcock, R.W. and M.B. Johnson. *Woodcock Johnson Psycho-Educational Battery-Revised, Form A.* Itasca, IL: Riverside, 1989 and 1990.

Bracken, B. A. *Bracken Basic Concept Scale-Revised.* San Antonio, TX: The Psychological Corporation, 1998.

More technical information on the North Carolina data will be available in a separate North Carolina School Readiness Report from the Frank Porter Graham Child Development Center, UNC-CH, in early 2001.

A representative sample of NC kindergarten children completed the Applied Problems subtest of the *Woodcock Johnson Psycho-Educational Battery, Form A* and the Quantity subtest of the *Bracken Basic Concept Scale –Revised* (Bracken, 1998). *First in America* reports the average (mean) of the standard scores for these two subtests. The national average for both subtests is 100 (standard deviation of 15). This involved re-scaling the Bracken subtest score to have the same national average and variance as the Woodcock Johnson.

NC schools' readiness for kindergartners

Average kindergarten class size

University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center. *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment.* Chapel Hill, NC: FPG, 2000.

More technical information on the North Carolina data will be available in a separate North Carolina School Readiness Report from the Frank Porter Graham Child Development Center, UNC-CH, in early 2001.

The North Carolina data about the average kindergarten class size were collected from a survey of a representative sample of NC kindergarten teachers that was part of the *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment.* Kindergarten teachers were asked, "How many students are enrolled in your class?" *First in America* reports the average (mean) number of students enrolled for the sample.

P[illegible]y of kindergarten teachers with early childhood licensure

University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Center. *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment.* Chapel Hill, NC: FPG, 2000.

More technical information on the North Carolina data will be available in a separate North Carolina School Readiness Report from the Frank Porter Graham Child Development Center, UNC-CH, in early 2001.

Data about kindergarten teacher licensure were collected from a survey of a representative sample of NC kindergarten teachers that was part of the *Fall 2000 Pilot Test of the North Carolina School Readiness Assessment.* Kindergarten teachers were asked to indicate which of the following areas of licensure they hold: (a) birth through kindergarten, (b) pre-school add-on, (c) early childhood (K-4), (d) elementary (K-6), (e) primary (1-4), (f) elementary-graduate (1-8), (g) other, or (h) none of the above. *First in America* reports the percentage of kindergarten teachers with birth through kindergarten or pre-school add-on licensure.

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Safe, Orderly, and Caring Schools

Parents' top priority for schools is making sure that their children are safe. Children's safety is also the top priority for taxpayers and educators.[1] Not only are safety and order important in their own right. They are also essential if students are to perform at high levels. No one can learn to her or his full potential in a chaotic classroom. Nor can teachers or students do their best work in a rundown, poorly equipped, or poorly supplied school. But effective educators go beyond offering students a safe, orderly, and sound place to learn. Students stay in school and learn better when they feel that they belong there — that the principal and teachers know who they are and care about them as individuals.[2] Families do more to support the schools and their children's learning when they too feel known and welcomed by the people who staff the schools.[3]

If North Carolina's schools are to be *First in the America*, they must be safe, free from disruptions, adequately equipped and supplied, and welcoming to students and families alike. In this section we present data on how North Carolina's schools stand on all of these dimensions.

Overall, North Carolina's schools now earn only a C+ (78%) for this goal. That is, the schools are operating at a level that is about 78% of the way to *First in America* targets for safety, order, and caring about students and their families. We do not assign grades to priorities within goal areas. But if we did, the schools would earn a C+ (78%) for orderliness, an F (56%) for the adequacy of facilities, equipment, and materials, a B (87%) for knowing and caring about individual students, and a B+ (89%) for making families feel welcome.

None of these scores puts the state where we would want to be. But clearly, it is the area of facilities, equipment, and materials where performance is dismal. In these areas it would be much fairer to say that North Carolina is failing its schools than to say that the schools are failing North Carolina. Neither teachers nor principals nor other local educators establish spending levels for these areas. Expenditures for facilities, equipment, and materials come largely out of local revenues. Perhaps some low-wealth districts cannot afford to do more. Other districts clearly could. Through a major bond issue passed in 1995,[4] state government made an effort to help with capital expenditures. But it appears that something is still seriously amiss here. If North Carolina really wants its schools to be *First in America*, and the present system for financing capital and related expenditures cannot generate sufficient resources to raise schools above a failing grade, it is time for a thorough re-examination and revision of the finance system.

Kindergartner Zachary Butts, Holt Elementary School, Durham, NC

SAFE, ORDERLY, AND CARING SCHOOLS

TARGETS INDICATORS SCORES, CHANGE, AND RANK

Change: ⇧ North Carolina's score was significantly better. / ⇩ North Carolina's score was significantly worse. / ⇔ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY SCHOOL FREE OF DRUGS, WEAPONS, AND DISRUPTION

- NC will be among the top 5 states in freedom from drugs, weapons, violence, and teacher victimization by students.

Incidence of drugs, weapons, and violence in NC's schools*

% OF STUDENTS OFFERED, SOLD, OR GIVEN AN ILLEGAL DRUG ON SCHOOL PROPERTY LAST YEAR:*

LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	FIRST
30%	29%	⇔	Tied for 9th	32%	24%	20% (ME)

% OF STUDENTS CARRYING A WEAPON ON SCHOOL PROPERTY DURING THE LAST 30 DAYS:*

LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	FIRST
9%	14%	⇧	Tied for 3rd	10%	8%	8% (HI, ME)

% OF STUDENTS THREATENED OR INJURED AT SCHOOL DURING THE LAST YEAR:*

LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	FIRST
8%	10%	⇔	Tied for 11th	8%	6%	5% (HI)

% OF STUDENTS INVOLVED IN A PHYSICAL FIGHT ON SCHOOL PROPERTY DURING THE LAST YEAR:*

LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	FIRST
12%	15%	⇔	Tied for 1st	16%	12%	12% (NC, HI)

% OF TEACHERS WHO REPORT BEING THREATENED OR ATTACKED IN THEIR SCHOOL:*

LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	FIRST
19%	N/A	N/A	Tied for 45th	15%	9%	8% (HI, SD)

LEGEND

* *On this indicator a lower score is better, a higher score is worse.*

Latest NC Score: *This is the average score for North Carolina taken from the most recent data collection available. Most recent data collection dates range from 1998 to 2000.*

Prior NC Score: *This is the average score for North Carolina taken from the preceding data collection.*

Change: *Change arrows show North Carolina's progress from the last data collection to the most recent data collection.*

⇧ *North Carolina's score is significantly better.*

⇩ *North Carolina's score is significantly worse.*

⇔ *Interpret North Carolina's score with caution — change is not significant.*

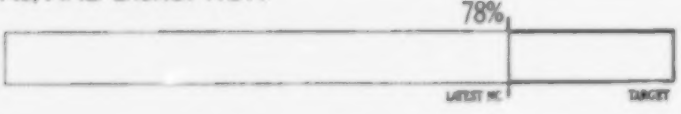
NC Rank: *North Carolina's rank among states for which data are available. States are ranked from best to worst.*

U.S. Average: *This is the average score for the United States taken from the most recent data collection available.*

Target Score: *This is the score North Carolina currently needs to achieve to reach the First in America target.*

First: *The score and state abbreviation is listed for the state receiving the best reported score.*

EVERY SCHOOL FREE FROM DRUGS, WEAPONS, AND DISRUPTION



Violence and behavior related to violence — such as carrying a weapon and using drugs — distract students and schools from their most fundamental objective: student learning. Almost half (44%) of North Carolina's teachers think that student misbehavior interferes with learning.[5] The *State of Our Nation's Youth* reports that almost half of all students (40%) feel that the behavior of other students in their school interferes with their performance.[6] Violent behavior can also be an indicator of other serious risk behaviors and criminal activity. "Young people who carry guns exhibit high rates of other disturbing behaviors with 46% reporting that they used illicit drugs in the last month, 61% reporting having been in trouble with the police, and 86% reporting having been in trouble at school."[7] There is some evidence that violence may also prompt some students to drop out of school. *The Metropolitan Life Survey of the American Teacher* in 1999 found that "six in ten public school students (63%) say that the problem of violence in their school is a factor in students leaving their school." Two-thirds of law enforcement officials (67%) say that the problem of violence in local public schools is a factor in students leaving school.[8]

Overall, North Carolina is making good progress in assuring that every student attends a school that is free from drugs, weapons, and disruption. In this priority area, the state's schools have performed best in limiting violence-related acts against students such as students carrying weapons in school and physical fights in school. We are still below the *First in America* target in eliminating threats and injuries to students at school and, to a lesser degree, in eliminating students' access to drugs at school. By far, North Carolina is weakest in eliminating teacher victimization by

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students. We rank among the worst states in the nation for threats and attacks against teachers. We will need to cut our reports of threats and attacks in half in order to meet our current goal for this *First in America* priority.

NC will be among the top 5 states in freedom from drugs, weapons, violence, and teacher victimization by students.

INCIDENCE OF DRUGS, WEAPONS, AND VIOLENCE IN NC'S SCHOOLS*

The Centers for Disease Control track incidents of "risk behavior" reported by high school students (grades 9-12) in 22 U.S. states. The data are reported in the *Youth Risk Behavior Surveillance* (YRBS) issued every two years. From 1993 to 1995, the rate of reported incidence of youth risk behaviors in North Carolina changed little. North Carolina did decrease in the percentage of students reporting that they carried a weapon on school property during the last 30 days from 14% in 1993 to 9% in 1995. In 1997,[7] the percentage continued declining to 8%. Out of the 22 states with comparable data in 1995, North Carolina ranked 3rd tied with three other states (Illinois, Massachusetts, and New Hampshire) for the lowest percentage of students reporting that they carried a weapon on school property during the last 30 days. Hawaii and Mississippi were the only states reporting a smaller percentage at 8%.[8]

In 1995, North Carolina shared the rank of first in the nation with the smallest percentage of students (12%) reporting that they were involved in a physical fight on school property in the last year. States ranged from the 12% in North Carolina and North Dakota to 19% in Nevada. North Carolina is just at the national average in the percentage of students reporting that they were offered, sold, or given an illegal drug on school property during the last year, and in the percentage of students reporting that they were threatened or injured with a weapon at school during the last year.

In contrast to student-related incidents, where there was little change, it appears that in North Carolina and nationwide, teachers' experiences with violence have become worse in the last decade. Based upon the results of the *1994 Schools and Staffing Survey* compiled by the National Center for Education Statistics (NCES), the most current data available for North Carolina and other states, North Carolina ranks 45th in the nation. Nineteen percent (19%) of North Carolina's teachers reported being threatened or attacked in school. Almost 1 of every 5 North Carolina teachers reported being threatened or attacked in school. In the states with the lowest rates of teacher threats and attacks, only about 1 of 12 teachers reported being threatened or attacked in school.

In the more recent *First in America* survey of North Carolina teachers, teacher reports of threats and attacks are relatively unchanged from the figures reported by NCES in 1994.[9] Results of the NCES and *First in America* surveys are also corroborated by the 1999 national *Metropolitan Life Survey of the American Teacher*, which found that "one in six public school teachers (16%) report having been the victim of violence in or around school." This is an increase from the 1993 Met Life survey when one in nine (11%) teachers reported being a victim of school violence.[10]

Related Information and Perspectives

In light of North Carolina's commitment to eliminating the minority achievement gap and increasing the high school graduation rate, issues related to school violence bear close examination. Students who are absent from school because they feel unsafe there lose vital instructional time and focus. In 1995, the most recent year for which we have comparable national data, almost one in twenty (5%) North Carolina high school students felt too unsafe to go to school on one or more days within a 30-day period.[11]

The national figures are similar. Nationally, almost 1 in 20 students (5%) in grades 9-12 felt too unsafe to go to school for one or more days in the 30 days preceding the survey.[12] Hispanic students were three times more likely than white students to feel unsafe in school. Black students were over two times more likely to feel unsafe than their white peers. Hispanic males (9%) and black females (8%) were among the groups feeling most unsafe. In contrast, white females felt the safest (2%). Across ethnic groups, 9th graders were most likely to feel unsafe going to school, a feeling that diminished steadily through 12th grade. In general, females were slightly more likely than males to report that they felt too unsafe to go to school.[13]

In 1997 and 1999, North Carolina was not included in the national averages calculated through the *Youth Risk Behavior Surveillance* (*see Data Sources and Notes for Safe, Orderly, and Caring Schools, page 63*), but the

recent national trends in student's feelings of safety are worth noting given the number of tragic student shootings publicized in recent years. In 1997, 4% of students in grades 9 through 12 nationwide felt too unsafe to go to school for one or more days in the 30 days preceding the survey. For the most part, this figure reflects declines in each racial group reporting for both males and females.[8] However in 1999, over 1 in 10 (11%) Hispanic students nationwide reported that they felt too unsafe to attend school.[9] This figure represents a 36% jump from Hispanic student reports in 1997 (7%).[10] Additional monitoring of this group may be warranted given that Hispanic males are among the most likely to leave school before graduation and that fears for their safety may be contributing to decisions to leave school.

In surveys of North Carolina teachers and principals conducted this year, 59% of teachers and 61% of principals reported that verbal abuse of teachers is a moderate or minor problem.[11] In grades six through twelve, 18% of teachers (close to one in five) reported that verbal abuse of teachers is a serious problem. The teachers' survey also found that 89% of teachers thought that student disrespect for teachers is a problem, and of that group, 30% thought student disrespect is a serious problem. Differing somewhat from teachers, 77% of principals reported that student disrespect for teachers is a moderate or minor problem in their school and 6% of principals reported this was a serious problem.

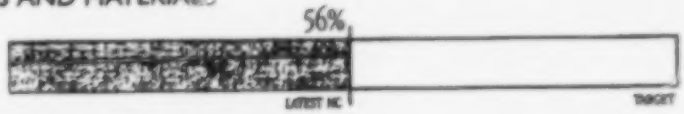
TARGETS	INDICATORS	SCORES, CHANGE, AND RANK

Changes: ↑ North Carolina's score was significantly better. / ↓ North Carolina's score was significantly worse. / ↔ Between North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY SCHOOL WITH ADEQUATE FACILITIES AND MATERIALS

• Nine of 10 NC teachers will report that facilities, equipment, and materials are adequate for instructional purposes.	Percentage of teachers reporting that facilities, equipment, and materials are adequate for instructional purposes	LATEST NC SCORE: 69%						
• NC schools will rank among the top 10 states in access to technology	Students per Internet-connected computer*	LATEST NC SCORE: 25	PRIOR NC SCORE: N/A	CHANGE: N/A	NC RANK: Tied for 48th	US AVERAGE: 14	TARGET SCORE: 10	RANK: 6 (AK, DE)
	Percentage of schools where at least half of teachers use a computer daily for planning and/or teaching	LATEST NC SCORE: 72%	PRIOR NC SCORE: N/A	CHANGE: N/A	NC RANK: Tied for 22nd	US AVERAGE: 69%	TARGET SCORE: 77%	RANK: 93% (AK)

EVERY SCHOOL WITH ADEQUATE FACILITIES AND MATERIALS



Sound buildings, adequate materials, laboratory and media equipment, and current technology do not guarantee high student performance. They do, however, provide a foundation for teaching and learning. They also send students, teachers, parents, and the public a powerful message about the value the state places on education. In any event, it is difficult to imagine learning to read without lively books, learning chemistry without a well-supplied lab, or learning to use technology effectively without computers and Internet connections.

Right now, the state's performance on this priority is the lowest in the *First in America* report. There are two clear weaknesses in this priority area: the adequacy of facilities, equipment, and materials as rated by teachers in the state, and the ratio of students per Internet-connected computer. Given the rapid growth of the state's student enrollment, it is not surprising that the majority of our school facilities are now inadequate, both structurally and technologically, for the student populations that they serve.

Public school facilities in North Carolina have been hard-pressed to keep pace with the state's increasing population. Over the last decade, public school enrollment in North Carolina has increased by almost 22%.[12] In the next ten years the rate of increase is expected to slow considerably, but the dramatic increase in enrollment over the last decade has already put tremendous pressure on North Carolina's existing school facilities. Routine wear-and-tear is taking its toll on buildings faster than normal, and higher enrollments have squeezed building capacity in many schools to a point where overcrowding is a serious concern. North Carolina, as many other states, needs to update and repair exist-

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ing infrastructure, while also addressing an urgent need for additional classroom space. In addition, growing enrollments and school modernization needs tighten the availability of materials and resources necessary for teaching.

Nine out of 10 NC teachers will report that facilities, equipment, and materials are adequate for instructional purposes.

PERCENTAGE OF TEACHERS REPORTING THAT FACILITIES, EQUIPMENT, AND MATERIALS ARE ADEQUATE FOR INSTRUCTIONAL PURPOSES

In order to obtain timely information about teachers' perspectives on the adequacy of facilities, equipment, and materials, we commissioned a written survey of approximately 900 randomly selected K-12 teachers statewide. Teachers were asked whether materials, classroom space, facilities (labs, media center, etc.), and equipment (computers, VCRs, etc.) were adequate in their school. To be counted as reporting that facilities, equipment, and materials are adequate for instructional purposes, a teacher had to agree or agree strongly that at least three of the four items were adequate in his or her school.

By this standard, four out of ten North Carolina teachers (40%) report that the facilities, equipment, and materials regularly available to them are adequate for instructional purposes. Similarly, 44% of principals, surveyed in the same manner as teachers, reported that their school had facilities, equipment, and materials adequate for instructional purposes.[31] So the state is well short of the *First in America* target of 90% for this priority.

In examining each of these components, it becomes clear that adequate space is a major problem. Only 49% of North Carolina teachers believe that their school has classroom space adequate for instruction. And just 41% of teachers report that their school has facilities that are adequate to meet the needs of students. One half of teachers (50%) report that their school has the materials needed by the staff. In contrast to teachers, just under three-quarters of school principals (70%) report that their school has the necessary materials needed by the staff. When asked specifically about science labs and wet sinks (separate from questions about overall adequacy of facilities), more than two in three principals (69%) and teachers (65%) in North Carolina report that their school does not have enough science labs with wet sinks and space for experiments and hands-on work — a vital part of science instruction.

Related Information and Perspectives

In our survey, approximately one-third of teachers and principals in North Carolina report that overcrowding is a problem in their school.[32] Almost half of all NC parents (49%) agreed or strongly agreed that their child's school is too crowded.[33] Asked how serious the problem of overcrowding is to a quality education, 66% of NC parents reported that overcrowding is either a very serious or a somewhat serious problem.

PARENTS' RESPONSES TO *FIRST IN AMERICA* SURVEY

	STRONGLY AGREE VERY SERIOUS	AGREE SOMEWHAT SERIOUS	DISAGREE NOT VERY SERIOUS	STRONGLY DISAGREE NOT AT ALL SERIOUS
My child's school needs to be renovated and modernized	15	33	36	7
School classrooms that are in poor physical condition [are a serious problem]	19	24	32	20
School buildings that are not wired for computers [are a serious problem]	18	19	28	27

The most recent national study of school conditions and the capital required to bring all schools up to good condition was conducted in 1994 by the U.S. General Accounting Office (GAO). The GAO reported state-by-state assessments of the adequacy of school buildings and selected building features. Thirty-six percent (36%) of North Carolina's school buildings were rated as fair, poor, or in need of replacement. North Carolina ranked 34th among all states in the condition of its buildings. The states with the best building conditions reported 19% of their buildings in fair condition, poor condition, or in need of replacement.[34]

While there is no recent study that duplicates the 1994 GAO report, the National Education Association (NEA) issued a report this year that indicates North Carolina would require the 11th highest estimated expenditures ($6.2 billion)[35] in the nation to raise the quality of its school buildings to a rating of good.[36] Because of the lack of availability of current cross-state data, the NEA used some statistical inferences in order to complete their study. In their report, the NEA noted that a more comprehensive survey including newer data from all 50 states might demonstrate much higher needs for funding.[37]

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Based on the NEA's findings, it appears that North Carolina's schools are more in need of renovation and repair than they are in need of replacement. In the NEA's *State-by-State School Modernization Facts — North Carolina 2000*, "90% of schools report a need to upgrade or repair buildings to good overall condition."[7] This summary also finds that, "55% of schools report at least one inadequate building feature (e.g., roof, plumbing, electrical, windows, HVAC) and 68% of schools report at least one unsatisfactory environmental factor (e.g., air quality, ventilation, acoustics, heating, lighting)."[8]

In North Carolina, counties pay directly for school building and maintenance costs (capital costs). Most schools do not have a yearly budget for capital needs (e.g., building maintenance) because often communities are not financially positioned to provide regular funding for school facilities and maintenance. In low-wealth counties, funding school building and maintenance is particularly challenging. Natural disasters — such as hurricanes — can be devastating to low-wealth counties. Last year, a number of North Carolina counties, first faced with the challenge of renovating and enlarging schools, were later forced to reallocate funds to rebuild schools destroyed by flooding.

To address the state's need for facility improvements, the N.C. General Assembly enacted the *Public School Building Bond Act of 1996*. The act provides $1.8 billion to counties in North Carolina to facilitate capital outlay projects for instructional facilities such as the construction of new schools, renovation of existing school buildings, and/or the purchase of equipment related to the improvement of school facilities. The act allots $30 million to small county school systems in recognition of their greater than average school construction needs and already high property tax rates. Overall, funding is allocated to counties based on their growth rate, ability to pay, and average daily membership (ADM) in schools. In order to secure the maximum state allocation of funds, counties must match the state allocation for high growth and ADM[9] by January 1, 2003.[9]

Adding to needs for renovation are demands for new computer technology. Education technology has been center stage in recent national and statewide discussions about school modernization and facilities renovation. Older schools can be difficult and costly to wire for computers and Internet connections. According to the NEA's report, North Carolina's education infrastructure needs (building repairs, new construction, building renovations including renovations for building codes and public access codes) are estimated at $6.2 billion.[8] The NEA estimates of North Carolina's current education technology needs at $1.3 billion.[8]

NC schools will rank among the top 10 states in access to technology.

Students' and teachers' access to technology is important for three reasons. First, a command of information technology is increasingly important in the workplace. People without technical skills will find it increasingly difficult to find and keep good jobs. This emerging need led North Carolina to require all students to pass a computer skills test in order to receive a high school diploma. This school year (2000-01), the computer skills test will become part of the ABCs analysis of school performance. Second, there is some evidence that when it is used well, technology can improve student learning.[10] Finally, teachers are knowledge workers. Indeed, they are in the business of imparting knowledge and know-how. They need access to the same types of technology that have spurred striking productivity gains in private sector knowledge organizations.

STUDENTS PER INTERNET-CONNECTED COMPUTER*

Levels of Internet connectivity provide one gauge of the exposure our students have to technology. According to the most recent data comparable to that from other states, North Carolina has 25 students per Internet-connected computer. The U.S. averages 14 students per Internet-connected computer. North Carolina places 48th in a ranking of states for this indicator.

There is some evidence — not yet reflected in the nationally comparable data used in this indicator — that North Carolina has made progress recently in reducing the number of students per Internet-connected computer (*see Related Information and Perspectives, page 54*). However, as North Carolina is measured on this target, the state is only 40% of the way towards reaching the current *First in America* target. Improvement on this indicator, not only in absolute terms but also in relation to other states that are improving, is critical to bring up overall performance on the *Every School with Adequate Facilities and Materials* priority.

PERCENTAGE OF SCHOOLS WHERE AT LEAST HALF OF THE TEACHERS USE A COMPUTER DAILY FOR PLANNING AND/OR TEACHING

Teachers' use of technology in planning and instruction is critical to the integration of technology into teaching the *Standard Course of Study* and in students' daily exposure to technology as part of their learning. In 72% of North Carolina's schools, at least half of teachers use a computer daily for planning and/or teaching. Nationally, North Carolina ranks 22nd in teachers' daily use of computers for planning and/or teaching. The state is above the national average (69%), where states range from a high of 92% (Arkansas) to a low of 24% (Nevada). To be in the current top ten, North Carolina needs an additional five percent (77%) of teachers using computers daily.

Related Information and Perspectives

There are limited sources of national data that allow us to make state-to-state comparisons about technology and the use of technology in schools. In order to provide a broader picture of this issue, this section draws upon an array of data from both the state and national levels.

According to the current *North Carolina Educational Technology Plan 2001-2005*, 56% of North Carolina's classrooms have Internet connections.[15] However, Internet connections in classrooms are useful only if there are computers to attach to them. In a recent survey of NC teachers and principals, almost 3 of every 4 teachers and principals say that their school does not have a sufficient number of computers available to students in each classroom.[16] Recognizing the need for both classroom Internet access and computers, the North Carolina technology plan recommends that each school classroom be equipped with one teacher workstation and 4 multi-media computers, a number that would provide four to five students per computer as recommended by the President's Committee of Advisors on Science and Technology for effective use of computers in instruction.[17] According to the *Annual Media and Technology Report*, North Carolina is approaching these goals.[18]

In a recent presentation to the State Technology Commission, the North Carolina Department of Public Instruction (NCDPI) reported the most current figures the state has collected for the number of students per Internet-connected computer. According to a NCDPI survey this year (2000), North Carolina has eight students per Internet-connected computer.[19] In 1999 the state had just over 11 students per Internet-connected computer. In 1997, North Carolina had 103 students per Internet-connected computer.[20]

Just as the usefulness of different generations of computers can vary, not all types of Internet connectivity are equally useful for instructional purposes. High-speed Internet connections (T-1 or ISDN lines) are most practical for classroom instruction, but they are also the most costly. Dial-in connections are more affordable for schools, but they are much slower and they are not as stable. As teachers work to improve instruction and maximize time for learning, slow Internet connections, particularly unreliable ones, are often impediments to using technology effectively and regularly in classrooms.

North Carolina is positioned to make substantial gains in teacher use of technology. In 1999, North Carolina was among the first states to require teaching candidates to demonstrate proficiency in technology in order to earn initial licensure.[21] In addition, North Carolina requires both veteran teachers and school administrators to earn professional development credits in technology in order to qualify for re-licensure (licensure renewal is required every five years). The state mandates that 20-25% of each districts' total technology budget be spent on teacher development.[22] This investment shows up clearly when North Carolina's teachers are compared with those of the rest of the nation. According to a Milken study for *Education Week*, the average North Carolina teacher participated in professional development in technology at twice the rate of the national average.[23] To continue the progress that North Carolina has made in recent years, the State Board of Education has required that all local districts develop technology plans that include staff development, curriculum development and delivery, infrastructure needs (maintenance, purchasing, replacement), and evaluation of technology programs.

For teachers to use technology regularly and effectively in their classrooms, they need sufficient access to technology and adequate technical support in their use of technology. According to the state technology plan, North Carolina schools support their technical infrastructure with an average of one technical support person to 800 computers. The state technology plan compares this to the ratio of one technical support person to 50 computers generally available in business and industry. Through local dollars, sixteen percent (16%) of North Carolina schools have employed an instructional technology facilitator, a staff member dedicated to supporting teachers in incorporating and integrating technology into their classrooms.[24]

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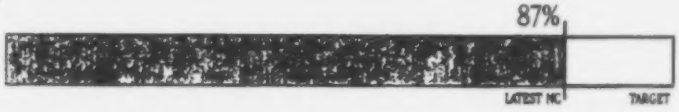
TARGETS	INDICATORS	SCORES, CHANGE, AND RANK
Changes: ⇑ North Carolina's score was significantly better. / ⇓ North Carolina's score was significantly worse. / ⇔ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.		
EVERY STUDENT KNOWN AND CARED FOR		
• NC will be among the top 10 states in reducing class size and chronic absenteeism.	Percentage of 4th and 8th graders in classes of 25 or fewer	GRADE 4:
		LATEST NC SCORE: 63% · PRIOR NC SCORE: 59% · CHANGE: ⇑ · NC RANK: 26th · US AVERAGE: 64% · TARGET SCORE: 90% · FIRST: 98% (ME)
		GRADE 8:
		LATEST NC SCORE: 60% · PRIOR NC SCORE: 52% · CHANGE: ⇑ · NC RANK: 20th · US AVERAGE: 57% · TARGET SCORE: 76% · FIRST: 92% (ME)
	Percentage of 8th graders missing 3 or more days of school during the last month*	LATEST NC SCORE: 22% · PRIOR NC SCORE: 20% · CHANGE: ⇔ · NC RANK: Tied for 9th · US AVERAGE: 22% · TARGET SCORE: 21% · FIRST: 19% (AL, TX, WI)
• Nine of 10 parents will say that their child is known and cared about as an individual in school.	Percentage of parents who report that their child is known and cared about as an individual by his/her teachers and principal	LATEST NC SCORE: 79%

EVERY STUDENT KNOWN AND CARED FOR



Whether a student feels known and cared for by an adult in his or her school can influence the student's academic performance and growth from childhood to adulthood. How well students are known and cared for is difficult to measure, but we can look at the size of classes, the rates of chronic absenteeism, and parents' perceptions of their child's relationship with school staff as indicators. In smaller classes, a teacher can get to know every student as an individual. Especially in the early grades, smaller classes can also have a sizeable and long-lasting impact on student achievement. Frequent absences from school obviously cut down on a student's opportunities to learn. But a pattern of frequent absences may also reflect a child's feeling of disconnection from school — a sense that no one really knows the child and wants him or her there. A third way to tell whether children feel known and cared about in school is simply to ask them or their parents.

North Carolina is very strong in this priority area. While the state still has some progress to make, we are close to meeting our targets in minimizing student absenteeism and in assuring that every child is known and cared for in school. We are at 79% of our current *First in America* target for reducing class size in eighth grade, and we are at 70% of our current target in fourth grade. The state needs to continue to make steady progress in reducing class size in order to meet our goal in this area by 2010.

NC will be among the top 10 states in reducing class size and chronic absenteeism.

PERCENTAGE OF 4TH AND 8TH GRADERS IN CLASSES OF 25 OR FEWER

Class size appears to have a sizeable and long-lasting impact on student achievement, particularly in early grades. It is generally believed that smaller classes afford students more contact with teachers and a more orderly classroom learning environment, and provide teachers more opportunity to individualize instruction. For these reasons, class size reduction has become a leading topic for educational reform in recent years.

From the available research, it appears that:

- The evidence that smaller classes promote increased learning is strongest for grades K-3. The evidence favoring smaller classes is weaker at other grade levels.[45]
- Slight reductions — say, from 27 to 25 — do not seem to help much. Only when classes drop below a certain threshold (no more than 20 and probably as few as 17) do large benefits appear and last into subsequent grades.[46]
- For students to profit substantially from smaller classes, they need to be in smaller classes for at least two years.[47]
- Smaller classes help students from all backgrounds, but they give a greater boost to minority and low-income students.[48]

- Not only do K-3 students in small classes learn more than similar students in larger classes, but they also continue to learn more even after they move into larger classes at grades four and above.[8]

Though the research support for class size is strongest for kindergarten through third grade, the only available data that permit cross-state comparisons are for class size in grades 4 and 8. These are not the ideal grades from which to consider class size in view of research concentrated on early elementary grades, but they do provide a sense of how North Carolina stands compared to other states on the class size issue.

North Carolina has made gains in reducing class size at these grade levels. In 1994, when these data were collected previously, only 59% of fourth graders and 52% of eighth graders were in classes of 25 or fewer. In 1998, 63% of fourth graders in North Carolina were in classes of 25 students or fewer compared to 64% nationally. Sixty percent (60%) of North Carolina eighth graders were in classes of 25 students or fewer, compared to 57% nationally. To make it into the current top ten, North Carolina would need at least 90% of 4th graders and 76% of 8th graders in classes of 25 or fewer.

Related Information and Perspectives

The two most common ways that states and districts report the number of students that teachers work with on a daily basis are class size and student-teacher ratio. While class size (the actual number of students in a class) and student-teacher ratio (the number of students in a school divided by the total number of teachers) may appear at first glance to be the same, they can be quite different. Student-teacher ratios are often smaller than class size numbers because the student-teacher ratio includes special teachers, teacher assistants, counselors, and other certified school staff when the ratio is calculated. As class size figures provide a more accurate view of what students and teachers experience daily in their classrooms, this report makes every effort to use class size statistics.

Small class sizes appear to benefit all students, but minority, low-income, and inner-city school students appear to benefit the most from smaller classes. In studies in Tennessee and Wisconsin, researchers found that, in small classes, minority student test score gains were greater than those for white students.[9] Because these gains were significant and lasting, these classrooms reduced the size of the achievement gap between students of different ethnic groups. Researchers have also found that students in smaller classes more often exhibit behaviors associated with successful students. Students initiated more contact with teachers, spent more time on-task, took more initiative in learning activities, and expended more effort in the classroom.

In a preliminary analysis of the students who participated in a Tennessee study (*The Tennessee STAR Study*) from 1985-89, it appears that students in small classes, for at least two years in kindergarten through third grade, were less likely to drop out of school and were more likely to graduate with honors.[10] In a number of studies, including one in Burke County, North Carolina, teachers in smaller classes had fewer discipline problems than in larger classes.[11] In keeping with researchers' observations of student behavior in small classes, evaluators in Wisconsin (*The Wisconsin SAGE Study*) have found that relative to larger class sizes, teaching in small classes affords more individualization through one-on-one tutoring, small group instruction, and large group instruction where students receive individual attention.[12]

There are some inherent problems in reducing class size, particularly to the level of approximately 17 students per teacher, as found most effective in kindergarten through third grade. First, qualified teachers are in short supply. Four years ago when California initiated a statewide class size reduction program, the state found itself severely short of licensed teachers, especially in schools serving high percentages of disadvantaged students. Since reducing all of its kindergarten through third grade classes to 20 students to one teacher, California has seen a dramatic rise in teachers who are teaching without a license. Second, smaller classes require additional classroom space, additional facilities, which may translate into new schools, and additional funds for more teachers. In times of teacher shortages, school districts often face increased personnel costs in both retaining current teachers and in attracting new teachers to the classroom. Finally, class size reductions may mean cuts in other school programs.

PERCENTAGE OF 8TH GRADERS MISSING 3 OR MORE DAYS OF SCHOOL DURING THE LAST MONTH*

The best nationally comparable data on student absenteeism comes from the National Assessment of Educational Progress (NAEP). NAEP reports the percentage of students in 4th and 8th grade who say that they were absent 3 or more days in the month prior to NAEP administration. Here we focus on attendance in 8th grade because research has found that 8th grade attendance is a good predictor of students dropping out.[54] Fourth grade attendance is a less reliable predictor.

In 1998, 22% of North Carolina's 8th graders missed three or more days of school in the previous month. In terms of missed instructional time, this translates to about 15% of every school month or over a full month of a 180-day school year. While the percentage of students who missed three or more days of school is high (it equals just over one in five students), North Carolina's 8th graders are at the national average on this indicator. The lowest reported percentage of students missing school was 19% (in Alabama, Texas, and Wisconsin), while the District of Columbia had the highest rate of absenteeism at 32%.

Nine of 10 parents will say that their child is known and cared about as an individual in school.

A feeling of "membership," belonging and being cared about, is a critical factor in whether students develop a bond with their school. The strength of the bond is extremely important to students' success in school, academically and socially. Researchers interviewed at-risk students who failed in their neighborhood school and were later successful in an alternative school.[55] Those students described their new school as a "friendlier and more caring place than their previous school had been." They also said that, in their new school, "teachers cared about them" and were willing to help them overcome academic and personal problems.[56] As these students felt known and cared about, they became more involved and more successful in their new school. When students become more involved in school, they are less likely to be chronically absent and less likely to drop out of school. Also, researchers have found that a common characteristic of "resilient children" — those who suffer a number of academic, social, or family disadvantages but who are, nevertheless, successful at school — is that they have stable relationships with one or more caring adults.[57]

PERCENTAGE OF PARENTS WHO REPORT THAT THEIR CHILD IS KNOWN AND CARED ABOUT AS AN INDIVIDUAL BY HIS/HER TEACHERS AND PRINCIPAL

We are very close to achieving the current *First in America* target that nine out of ten parents will say that their child is known and cared about as an individual at school. This year, almost eight in ten parents (79%) reported that their child is known and cared about as an individual by his/her teachers and principal. This number is based on a survey of approximately 500 parents statewide. Parents were asked to what degree they agreed or disagreed with the following statements: teachers in my child's school really seem to care about the students, my child feels cared about in school; and, the staff in my child's school make my child look forward to going to school. In order to be included in our percentage, parents had to answer that they agreed or agreed strongly with two of these three statements.

Related Information and Perspectives

Small schools help students succeed, according to several recent research studies. A study of small public schools conducted by Bank Street College finds that in small schools:

- students are more attached to their school and have better attendance rates,
- students are more persistent in their learning — they fail fewer courses and drop out at significantly lower rates,
- students demonstrate stronger academic performance through improved standardized test scores, higher grade point averages, fewer grade retentions, and
- students are known by teachers and peers and this increased sense of identity has led to fewer incidents of violence.[58]

In their study, researchers at Bank Street College are careful to note that small schools are not successful merely because they are small. They note that school size is just one ingredient of school reform, and that administrative

structures, teaching practices, and the school's mission must evolve to complement a smaller student body.

North Carolina recently completed its own study examining the relationship between school size and the behavior and academic performance of students across the state. The study found that there was some connection between higher student achievement and smaller schools at the elementary level, but data was not conclusive at the middle and high school levels. In addition, the North Carolina study did not find any clear connection between lower dropout rates and small schools. School violence only appeared to decrease slightly in small middle schools. [9]

In general, students in North Carolina are not as likely to attend a small school as are students nationally. In 1998 in North Carolina, 29% of high school students attended a school of 900 students or fewer compared to 31% of students nationally. Twenty-nine percent (29%) of middle school students attended a school of 600 students or fewer, also compared to 31% nationally. Just 11% of North Carolina elementary students attended a school of 350 students or fewer compared to 17% nationally. [10]

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK
Changes: ↑ North Carolina's score was significantly better. / ↓ North Carolina's score was significantly worse. / ↔ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.		
EVERY FAMILY WELCOMED		
• Nine of 10 families will say they feel welcomed and encouraged to participate in their children's schools.	Percentage of families who feel welcomed and encouraged to participate in their child's school	LATEST NC SCORE: 89%

EVERY FAMILY WELCOMED

Research has shown that parents have a considerable effect on their children's motivation and performance in school. [11] The level of their involvement can vary measurably from school to school, even within school districts. In turn, what schools do to welcome families is among the primary influences on family involvement in children's education.

North Carolina is very close to achieving its target in this area. With continued attention to school's efforts to welcome families, North Carolina can achieve the *First in America* target for this priority.

Nine out of ten families will say they feel welcomed and encouraged to participate in their child's school.

Helping parents feel welcomed and valued by schools takes deliberate action on the part of schools. Two trends make long-term parental involvement in their children's education challenging. First, as their children get older, parents have less contact with the school their child attends. They volunteer less and they have fewer interactions with school personnel (teachers, administrators, and other certified staff). Second, as their children advance in grade level, parents have fewer positive interactions with schools while negative interactions are increasing. Many times, a parent's first visit to a school occurs when their child is in trouble. Helping parents to feel valued and welcome given these potential barriers requires schools to take a variety of actions. For example, schools are more successful in welcoming families when they recognize that parents may feel disconnected from schools and work to reduce distrust and cultural barriers between the parents and school. Schools can also address language barriers and work to accommodate families' work schedules in their efforts to welcome parents at school. Some schools have parent volunteers who act as

home-school coordinators. These coordinators develop parent involvement programs, provide personal contacts for parents, and are especially helpful in encouraging hard-to-reach families, including immigrants, to participate in their children's school.[47]

PERCENTAGE OF FAMILIES WHO FEEL WELCOMED AND ENCOURAGED TO PARTICIPATE IN THEIR CHILD'S SCHOOL

Eight out of ten families (80%) in the state feel welcomed and encouraged to participate in their child's school according to the *First in America* survey of parents conducted this year. This is quite close to the nine in ten target. In order to be included in the reported percentage, parents had to agree or strongly agree with three of the following four statements: when I have a concern about my child, I can count on the school for support; I feel comfortable visiting my child's school; if I call the school, I receive courteous service; and, it's easy to contact teachers at my child's school. Other measures of family involvement in schools are included in *Strong Family, Business, and Community Support*, under the priority *Every Family Involved in Their Child's Learning* *(see page 86)*.

Related Information and Perspectives

Schools' practices can influence families' support for and ratings of school administrators, teachers, and programs. According to our recent survey, 77% of parents in North Carolina agree or strongly agree that their child's school is doing an excellent job of preparing students for the future. Similar to nationwide opinion poll trends, parents in North Carolina rate their child's school higher than other schools in their district (71%), and much higher than they rate the state's schools (53%).[48]

Safe, Orderly, and Caring Schools: Summary of Performance

Overall, North Carolina is performing well in two priority areas within the *Safe, Orderly, and Caring Schools* goal. The state is close to achieving its targets in both the priority *Every Student Known and Cared For* and in the priority *Every Family Welcomed*. With continued steady progress in both of these areas, North Carolina can achieve the current *First in America* targets for these priorities by the year 2010.

While North Carolina is making progress in assuring that *Every School is Free of Drugs, Weapons, and Disruption*, most notably in decreasing the incidence of students carrying weapons at school, the state has not made real progress in eliminating teacher victimization by students. To reach the target in this area, schools must work to decrease threats and attacks against teachers.

It will be difficult for the state to reach the *First in America* targets for *Every School with Adequate Facilities and Materials* without improving school facilities substantially. While few dispute the need to renovate existing schools, or to build new schools to alleviate overcrowding, finding a mechanism to fund school building and modernization remains a challenge statewide.

To achieve this *First in America* goal, North Carolina also needs to continue to support teachers' use of technology and to improve students' and teachers' access to technology. Specifically, the state needs to increase the number of Internet-connected computers in schools. North Carolina has made progress in access to technology in recent years, but to be *First in America*, the state's progress needs to outpace that of the nation.

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[11] National Education Association, *State-By-State School Modernization Facts: North Carolina*.

[12] Ibid.

[13] All NC counties are ranked by wealth as measured against the average state wealth. Counties are required to match each $1.00 of bond proceeds with $.05 times their wealth rating. This information is provided by the State Board of Education for the 1995-96 fiscal pursuant to Section 17.1 of chapter 507 of the 1995 Session Laws.

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[8] Molnar, et al., "Evaluating the SAGE Program: A Pilot Program in Targeted Pupil-Teacher Reduction in Wisconsin"; A. Molnar, P. Smith, and J. Zahorik, *1998-99 Evaluation Results of the Student Achievement Guarantee in Education (SAGE) Program* (Milwaukee, WI: University of Wisconsin – Milwaukee, 1999); Finn, *Class Size and Students At-Risk: What is Known? What is Next? A Commissioned Paper.*

[9] Jayne Boyd-Zaharias and Helen Pate-Bain, *The Continuing Impact of Elementary Small Classes*, paper presented at the annual meeting of the American Educational Research Association (New Orleans, LA, April 2000), 1.

[10] C. M. Achilles, *Success Starts Small: Life in a Small Class: Final Report* (Greensboro, NC: University of North Carolina, 1994); Molnar, et al., "Evaluating the SAGE Program: A Pilot Program in Targeted Pupil-Teacher Reduction in Wisconsin," cited in Public Schools of North Carolina, Division of Accountability Services, Evaluation Section, "Update on Class Size Research," *Evaluation Brief* 2, no. 6 (2000): 6.

[11] Molnar, et al., "Evaluating the SAGE Program: A Pilot Program in Targeted Pupil-Teacher Reduction in Wisconsin"; A. Molnar, P. Smith, and J. Zahorik, *1998-99 Evaluation Results of the Student Achievement Guarantee in Education (SAGE) Program.*

[12] Melissa Roderick, *The Path To Dropping Out: Evidence for Intervention* (Westport, CT: Auburn House, 1993), 100.

[13] Wehlage, et al.

[14] Ibid., 114.

[15] Beth M. Miller, *Out-of-School Time: Effects on Learning in the Primary Grades* (Wellesley, MA: School Age Child Care Project, 1995), cited in U.S. Department of Education and U.S. Department of Justice, *Safe and Smart: Making After-School Hours Work for Kids* (Washington, DC: GPO, 1998), available from http://www.ed.gov/pubs/SafeandSmart/title.html.

[16] Patricia A. Wasley, et al., *Small Schools: Great Strides* (New York: Bank Street College of Education, 2000).

[17] Public Schools of North Carolina, Division of Accountability Services, Evaluation Section, *School Size and its Relationship to Achievement and Behavior* (Raleigh, NC: NCDPI, 2000); also available from http://www.dpi.state.nc.us/accountability/evaluation/index.html.

[18] Education Week, *Quality Counts 2000: Who Should Teach?* (Bethesda, MD: Education Week, 2000).

[19] Jennifer Ballen and Oliver Moles, *Strong Families, Strong Schools: Building Community Partnerships for Learning* (Washington, DC: U.S. Department of Education, 1994), available from http://eric-web.tc.columbia.edu/families/strong/.

[20] B.D. Goodson, J.P. Swartz, and M.A. Millsap, *Working With Families: Promising Programs to Help Parents Support Young Children's Learning* (Cambridge, MA: Abt Associates, 1991) (ERIC Abstract); D.C. Lueder, "Tennessee Parents Were Invited to Participate – and They Did," *Educational Leadership* 47, no. 2 (1989): 15-17 (ERIC Abstract), cited in Ballen and Moles.

[21] Georgia State University Applied Research Center, *Statistical Report for the First in America Parents' Survey.*

Data Sources and Notes for Safe, Orderly, and Caring Schools

EVERY SCHOOL FREE OF DRUGS, WEAPONS, AND DISRUPTION

Incidence of drugs, weapons, and violence in North Carolina's schools

Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance. "Youth Risk Behavior Surveillance — United States 1993." *Morbidity and Mortality Weekly Review* 44, no. SS-1 (1995).

Centers for Disease Control and Prevention, Youth Risk Behavior Surveillance. "Youth Risk Behavior Surveillance —United States 1995." *Morbidity and Mortality Weekly Review* 45, no. SS-4 (1996).

The Centers for Disease Control (CDC) conduct a biannual survey of high school students, through the Youth Risk Behavior Surveillance System (YRBSS). The YRBSS monitors six categories of health-risk behaviors among high school students: behaviors that contribute to unintentional and intentional injuries, tobacco use, alcohol and other drug use, sexual behaviors, unhealthy dietary behaviors, and physical inactivity. The YRBSS includes both a national school-based survey conducted by CDC and state school-based surveys conducted by state education agencies.

The information and rankings from the YRBSS are reported in the *Youth Risk Behavior Surveillance*. All states with an overall response rate of 60 percent or more and appropriate documentation of questionnaire procedures are included. Data from these states may be generalized to all public school students in grades 9-12 in the state. In 1995, data from 22 states met these criteria and are included in the *First in America* reports.

North Carolina participated in the 1997 survey but did not meet the 60 percent response rate requirement necessary to ensure comparability with other states. North Carolina's 1997 response rate was 58 percent. Some 1997 data is referenced in the *First in America 2000 Progress Report* text, but it should not be considered comparable to data from other states. North Carolina did not participate in the 1999 survey.

Percentage of teachers who report being threatened or attacked in their school

U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey. *Public School Teacher Surveys of the Schools and Staffing Survey*. Washington, DC: NCES, 1991.

U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey. *Characteristics of Stayers, Movers, and Leavers: Results from the Teacher Follow-up Survey, 1994-95*. Washington, DC: NCES, 1995.

The *Schools and Staffing Survey* (SASS) consists of four main component surveys administered to a sample of public and private districts, schools, principals, and teachers. Each survey includes a written and interview component. The SASS samples are large enough to support estimates at both the state and national levels for the public schools. Responses from 181 schools and 908 teachers were included in the North Carolina data.

The *Schools and Staffing Survey* is one of the only national data sources providing information on teachers and teacher quality at the state level. Though somewhat outdated, information from the *Schools and Staffing Survey* was included in order to provide nationally comparable data on North Carolina's teachers. The survey was repeated during the 1999-2000 school year and will provide more timely information for future editions of the *First in America* reports. For many of the indicators reported from the *Schools and Staffing Survey*, more current data on North Carolina's teachers from the North Carolina Department of Public Instruction and the *First in America Teachers' Survey* has been included in the *First in America Progress Report*.

EVERY SCHOOL WITH ADEQUATE FACILITIES AND MATERIALS

Percentage of teachers reporting that facilities, equipment, and materials are adequate for instructional purposes

Georgia State University Applied Research Center. *Statistical Report for the First in America Teachers' Survey*. Atlanta, GA: GSU, 2000.

See Technical Appendix B, First in America Survey Methodology for technical information.

The *First in America Teachers' Survey* asked teachers whether they strongly agreed, agreed, neither agreed nor disagreed, disagreed, or strongly disagreed with each of the following statements:

This school has necessary materials needed by the staff.
This school has computers, VCRs, and other instructional equipment that are available as needed by the staff.
This school has classroom space that is adequate for instructional purposes.
This school has facilities that are adequate to meet the needs of the students.

The *First in America* reports cite the percentage of teachers who strongly agreed or agreed with three of four of the statements. The percentage is derived from the total number of responses.

Students per Internet-connected computer

Education Week. *Technology Counts 1999: Building the Digital Curriculum*. Bethesda, MD: Education Week, 1997.

From October 1998 through June 1999, the Milken Exchange mailed multiple copies of a survey to state technology directors in 32 participating states, who then distributed them to approximately 7,560 district technology coordinators. The exchange received approximately 4,000 responses. Education Week's *Technology Counts* reports data only for states with a 40 percent or greater response rate, with the exception of New Mexico, which had a 38 percent response rate. New Mexico officials provided the Milken Exchange with a written statement that the responding districts were representative of the demographics of the state. Response rates in these 26 states ranged from 38 percent in New Mexico to 100 percent in Nevada and Wyoming. Data for the remaining 18 states was gathered directly from schools through a separate survey conducted by Market Data Retrieval.

An Internet-connected computer is any computer with Internet access.

Percentage of schools where at least half of teachers use a computer daily for planning and/or teaching

Education Week. *Technology Counts 1999: Building the Digital Curriculum*. Bethesda, MD: Education Week, 1999.

See data note for Safe, Orderly, and Caring Schools, EVERY SCHOOL SAFE AND ADEQUATE, Students per Internet-connected computer.

Survey respondents were asked "What percentage of your teachers use a computer daily for instructional planning and/or teaching?"

EVERY STUDENT KNOWN AND CARED FOR

Percentage of 4th and 8th graders in classes of 25 or fewer

U.S. Department of Education, National Center for Education Statistics, National Assessment of Education Progress. 1996 Mathematics Assessment Teacher Summary Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Education Progress. 1998 Reading Assessment Teacher Summary Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

See data note for High Student Performance, EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS, Percentage of students scoring proficient or higher on NAEP assessments, NAEP grade 4 and 8 reading.

As part of the teacher questionnaire that is administered with NAEP assessments, 4th and 8th grade teachers were asked to report the average size of their reading or math classes. Teacher responses were collapsed into five categories. The *First in America* reports include the number of teachers whose response fell into the categories of 1-20 and 21-25. Data from 38 states were included in the 4th grade indicator and data from 35 states were included in the 8th grade indicator.

Percentage of 8th graders missing 3 or more days of school during the last month

U.S. Department of Education, National Center for Education Statistics, National Assessment of Education Progress. 1996 Mathematics Assessment Student Summary Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Education Progress. 1998 Reading Assessment Student Summary Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

See data note for High Student Performance, EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS, Percentage of students scoring proficient or higher on NAEP assessments, NAEP grade 4 and 8 reading.

As part of the student questionnaire that is administered with NAEP assessments, 4th and 8th graders were asked to report how many days of school they missed during the last month. Student responses were collapsed into five categories. The *First in America* reports include the number of students whose response fell into the categories: 3-4, 5-10, and more than 10. Data from 37 states were included in the indicator.

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Percentage of students who feel known and cared about as individuals

Georgia State University Applied Research Center. *Statistical Report for the First in America Parents' Survey.* Atlanta, GA: GSU, 2000.

See Technical Appendix B, First in America Survey Methodology for technical information.

The *First in America Parents' Survey* asked parents whether they strongly agreed, agreed, neither agreed nor disagreed, disagreed, or strongly disagreed with each of the following statements:

Teachers in my child's school really seem to care about the students.
My child feels cared about in school.
The staff in my child's school make my child look forward to going to school.

The *First in America* reports cite the percentage of parents who strongly agreed or agreed with two of three of the statements. The percentage is derived from the total number of responses.

EVERY FAMILY WELCOMED

Percentage of families who feel welcome and encouraged to participate in their child's school

Georgia State University Applied Research Center. *Statistical Report for the First in America Parents' Survey.* Atlanta, GA: GSU, 2000.

See Technical Appendix B, First in America Survey Methodology for technical information.

The *First in America Parents' Survey* asked parents whether they strongly agreed, agreed, neither agreed nor disagreed, disagreed, or strongly disagreed with each of the following statements:

When I have a concern about my child, I can count on the school for support.
I feel comfortable visiting my child's school.
If I call the school, I receive courteous service.
It's easy to contact teachers at my child's school.

The *First in America* reports cite the percentage of parents who strongly agreed or agreed with three of four of the statements. The percentage is derived from the total number of responses.

Quality Teachers and Administrators

High quality teachers have recently taken center stage in national discussions about ways to improve student achievement. There is mounting evidence to support parents' longstanding belief that good teachers are keys to children's learning. But teachers cannot do the job alone. Research also confirms that strong leadership from principals is crucial to schools' performance. Further, teachers who leave the profession cite lack of administrative support as one of their prime reasons for leaving. With a serious and worsening teacher shortage in many districts, we cannot afford to lose larger numbers of teachers to other states, other professions, or early retirement. Strong leadership should help North Carolina schools keep good teachers. Working conditions are also important to keeping teachers, as well as to helping them continue to learn and assuring that they can use their skills to the best advantage. Finally, while surveys show that compensation is not the top motivator for teachers, they must make at least enough to be able to afford to remain in the profession.

In this section, we consider how much progress North Carolina has made in assuring that teachers in the state are competent, caring, and qualified. We also consider whether principals show effective leadership in schools, and whether North Carolina's schools are good places to work and learn.

As noted in the *Introduction*, the data show that overall, the state is doing reasonably well in this goal area, earning a B- (83%) in our grading scheme. If we assigned grades for the priorities within a goal, NC teachers would rate a high B (87%) for competence and qualifications. Principals would also earn a B (84%) on the effective leadership measures. It is schools as work environments that pull down the grade for the goal overall. As we shall see, teachers and principals give their schools low marks as places to work and learn, resulting in the equivalent of a C+ (78%) for that priority.

QUALITY TEACHERS AND ADMINISTRATORS

TARGETS | INDICATORS | SCORES, CHANGE, AND RANK

Change: ⬆ North Carolina's score was significantly better. / ⬇ North Carolina's score was significantly worse. / ⬌ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY TEACHER COMPETENT, CARING, AND QUALIFIED

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK						
• NC teachers will score at or above the national average on teacher examinations.	Average examination scores of NC teachers	PRAXIS CONTENT KNOWLEDGE EXAMINATIONS:						
			LATEST NC SCORE: 167		PRIOR NC SCORE: N/A		CHANGE: N/A	US AVERAGE: 167
		PRAXIS PRINCIPLES OF LEARNING AND TEACHING EXAMINATION:						
			LATEST NC SCORE:		PRIOR NC SCORE:		CHANGE:	US AVERAGE:
		GRADES K-6	174		173		⬆	173
		GRADES 5-9	172		174		⬇	172
		GRADES 7-12	175		174		⬆	174
• NC will be among the top 10 states in the percentage of teachers who are fully licensed.	Percentage of teachers meeting licensure requirements	LATEST NC SCORE: 93%	PRIOR NC SCORE: 79%	CHANGE: ⬆	NC RANK: Third for 2001	US AVERAGE: 92%	TARGET SCORE: 96%	FIRST: 99% (HI, WY)
• NC will be one of the top 10 states in the percentage of teachers teaching in their field.	Percentage of secondary teachers teaching in the field in which they are licensed	LATEST NC SCORE: 66%	PRIOR NC SCORE: 68%	CHANGE: ⬌	NC RANK: Third for 23rd	US AVERAGE: 69%	TARGET SCORE: 72%	FIRST: 81% (MD)
• Nine of 10 NC teachers will engage in high quality professional development.	Percentage of teachers who report that they have participated in high quality professional development	LATEST NC SCORE: 56%						
• NC will continue to lead the nation in the number of National Board Certified Teachers.	Number of teachers attaining National Board Certification	LATEST NC SCORE: 1262	PRIOR NC SCORE: 536	CHANGE: ⬆	NC RANK: 1st	US AVERAGE: N/A	TARGET SCORE: 1262	FIRST: 1262 (NC)
• NC will be one of the top 10 states in the percentage of teachers with master's degrees.	Percentage of teachers with master's degrees	LATEST NC SCORE: 36%	PRIOR NC SCORE: 37%	CHANGE: ⬌	NC RANK: 40th	US AVERAGE: 47%	TARGET SCORE: 56%	FIRST: 80% (CT)
• 95 percent of NC teachers will remain in the teaching profession from one year to the next.	Percentage of teachers who remain in the teaching profession	LATEST NC SCORE: 87%	PRIOR NC SCORE: 88%	CHANGE: ⬇				

LEGEND

* *On this indicator a lower score is better, a higher score is worse.*

Latest NC Score: *This is the average score for North Carolina taken from the most recent data collection available. Most recent data collection dates range from 1990 to 2000.*

Prior NC Score: *This is the average score for North Carolina taken from the preceding data collection.*

Change: *Change arrows show North Carolina's progress from the last data collection to the most recent data collection.*

- ⬆ *North Carolina's score is significantly better.*
- ⬇ *North Carolina's score is significantly worse.*
- ⬌ *Interpret North Carolina's score with caution — change is not significant.*

NC Rank: *North Carolina's rank among states for which data are available. States are ranked from best to worst.*

U.S. Average: *This is the average score for the United States taken from the most recent data collection available.*

Target Score: *This is the score North Carolina currently needs to achieve to reach the First in America target.*

First: *The score and state abbreviation (s) listed for the state receiving the best reported score.*

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EVERY TEACHER COMPETENT, CARING, AND QUALIFIED

After decades of varied attempts to raise student achievement, there is now broad consensus among education policymakers and researchers that teachers' knowledge, know-how, and commitment are among the most important factors in determining how well students learn.[1] States with the most highly qualified teachers and with a history of investing in improving teachers' qualifications frequently lead the nation in student achievement in mathematics and reading.[2]

The public seems to agree that good teachers are crucial. Asked what steps could be taken to lift student achievement, 90% of Americans cited "ensuring a well-qualified teacher in every classroom" as the second most important factor behind maintaining safe and orderly schools.[3]

A number of states have undertaken reforms designed to upgrade teacher qualifications. North Carolina has been among the earliest and most active states in initiating changes to improve the quality of teachers. In the 1980s and into the early 90s, the state moved to ensure that its teachers had better preparation in subject matter and teaching skills. The state introduced stricter examinations for teachers' initial licensing, increased the number of subject matter and education courses prospective teachers needed to become certified, and to help attract new talent and keep teachers in teaching, raised teacher salaries.

The *1997 Excellent Schools Act* continued and extended attempts to improve teacher quality. Along with a range of other education initiatives, the state provided funding to support beginning and experienced teachers' efforts to meet higher professional teaching standards. Teachers' licensing standards were once again upgraded and pay incentives granted to teachers who pursued master's degrees or achieved certification by the National Board for Professional Teaching Standards. The state also began a move to raise teacher salaries to the national average.

In this section, we examine how much progress North Carolina has made in recruiting and keeping competent, caring, and qualified teachers. We begin by comparing North Carolina teachers' scores on teacher examinations with the national average. We also ask whether North Carolina is among the top ten states in the percentage of teachers who are fully licensed, hold master's degrees, and teach in the subjects they are qualified to teach. In addition, we consider what percentage of North Carolina teachers participate in high quality professional development and whether North Carolina continues to lead all states in the number of National Board Certified Teachers. Finally, we look at whether a high percentage of teachers in the state remain in teaching from one year to the next.

As noted above, by the standards set in the targets for competent, caring, and qualified teachers, North Carolina is performing well. On average, the state is about 87% of the way to the targets for this priority. If we assigned grades for performance on each priority, NC would earn a high B (not quite a B+) for competent, caring, and qualified teachers. The state's top rank in numbers of National Board Certified Teachers boosts the grade, while poorer showings in the areas of professional development and teachers with master's degrees pull it down.

NC teachers will score at or above the national average on teacher examinations.

AVERAGE EXAMINATION SCORES OF NC TEACHERS

Research confirms that teachers' knowledge of subject matter and their knowledge of how to teach strongly influence student achievement.[4] So teacher testing has become part of most states' attempts to improve teacher quality. Such tests are designed largely to screen out teachers who lack essential knowledge and skills needed to teach, not to distinguish between teachers with basic qualifications and highly accomplished teachers.[5]

In North Carolina, teachers are required to pass exams developed by the Educational Testing Service, the organization responsible for developing and administering a number of national tests, including the SAT and the Graduate Record Examination (GRE). Praxis examinations, as the exams for teachers are called, are the most commonly used series of licensure exams in the United States.

The target is for new North Carolina teachers to score at or above the national average on Praxis examinations of their subject matter knowledge and their knowledge of general principles of learning and teaching. The national average is the only available basis for comparing how North Carolina teachers stack up against others around the country. ETS does not report and will not divulge other states' scores.

A complex mix of Praxis subject matter exams are administered to North Carolina teachers in different specialty areas. So to measure how well new NC teachers know their subjects compared with other teachers around the country, we have selected a dozen "content knowledge" examinations in core academic areas (English, mathematics, sciences, social studies, and Spanish). On average, 11 states require these examinations. So here the term "national" means "in states around the country" rather than "in all states." About 36,000 teachers took one or more of these examinations in 1998-99, the most recent year for which data are available.

North Carolina teachers' average score across the 12 examinations precisely matches the national average. Both NC teachers and teachers in all states that use the examinations score, on average, at 167 on a scale that runs from 100 to 200. (In reporting Praxis scores, ETS uses medians rather than means. The median is the middle score in a ranked set of scores.)

We also use a Praxis test to provide a gauge of teachers' knowledge about teaching. Though state policies on which examinations are required are now changing, at present prospective teachers in the state must take the Praxis Principles of Learning and Teaching (PLT) examination at one of three grade levels, K-6, 5-9, or 7-12. The test assesses a teacher's knowledge of a variety of essential job-related tasks. About 12,000 teachers in 13 states took this exam each year between October, 1996 and August, 1999.

The scores for people who want to teach in North Carolina are at or slightly above the national median at all three grade levels tested. The median score of NC teachers at the Grades K-6 level was 174, and the US median examination score was 173. At the Grade 5-9 level, both North Carolina teachers' median score and the US median score was 172. At Grades 7-12, the average score of NC teachers was 175, while the U.S. median score was 174.

Overall, the results show some improvement from the previous year. The most marked improvement was at the Grades K-6 level. The median score rose from 171 to 174. Grades 7-12 also showed a slight improvement from last year's scores. In contrast, there was a two-point drop in score at the Grade 5-9 level, although the results remain at the US average.

In sum, prospective North Carolina teachers score slightly above the national average on examinations of their subject matter knowledge and their knowledge of general principles of teaching and learning. This meets the *First in America* target for these indicators.

NC will be among the top 10 states in the percentage of teachers who are fully licensed.

PERCENTAGE OF TEACHERS MEETING LICENSURE REQUIREMENTS

There is substantial evidence that teachers who meet all of their states' licensure requirements do a better job than those who do not.[4] The standard foundation for licensure is the completion of an approved teacher education program at an accredited college or university. Currently, all new teachers must also pass a Praxis subject matter examination in their main teaching field, as well as the Praxis Principles of Teaching and Learning test. In addition, they must teach successfully for three years and complete a portfolio of lesson plans, student work, and analyses of their teaching and its impact on students. The state has reciprocity agreements that permit educators from other states to obtain a North Carolina license. Licensed out-of-state teachers who have taught successfully for at least four years are not required to pass Praxis testing requirements to become fully licensed in North Carolina.

The current rise in student enrollments together with the rising rate of teacher retirements are making it increasingly difficult for many NC districts to find enough qualified teachers. The challenge is especially acute in many rural, low-wealth districts and in certain subject areas throughout the state.

Despite the worsening shortages, the *First in America* target is to be among the top ten states in the percentage of teachers who are fully licensed. Unfortunately, the latest year for which reliable state-by-state data are available is 1993-94. So the data for this indicator do not reflect recent developments within states across the country. Ninety-three percent (93%) of North Carolina teachers were fully licensed in 1993-94. This represented a considerable

improvement over 79% in 1990-91, when the previous report was issued by the National Center for Education Statistics. Though North Carolina was slightly above the US average of 92%, states in the top ten had at least 96% of teachers fully licensed. So the state was three percentage points below the target.

Breaking into the top ten will be difficult. Student enrollments continue to rise, and North Carolina will need over 80,000 new teachers over the next eight years. While North Carolina school districts have made strides toward ensuring that all of their teachers are fully licensed, the continuing rise in student enrollments and the high rate of teacher retirements may mean a step back before substantial progress is made.

NC will be one of the top 10 states in the percentage of teachers teaching in their field.

PERCENTAGE OF SECONDARY TEACHERS TEACHING IN THE FIELD IN WHICH THEY ARE LICENSED

Teachers who are licensed to teach one subject are sometimes assigned to teach another subject. For example, if a principal is scheduling classes and needs more mathematics classes taught but does not have a licensed math teacher to teach them, she may assign an English or social studies teacher to teach math. The argument is often that enough mathematics teachers are simply not available, and that it is better to have a teacher licensed in some subject to handle the class than to hire a long-term substitute who may have no more than a high school education.

This practice is permitted, so long as the teacher is licensed in some field and teaches out of field on a temporary basis. But the practice of assigning teachers to teach out of the field in which they are qualified means that some classes are taught by teachers who lack an adequate command of the subject they teach. Research confirms what common sense would tell us. You cannot teach what you do not know. Teachers' knowledge of the subject matter they teach does influence student learning.[7] So the percentage of teachers teaching within their field is an important statistic.

The National Center for Education Statistics (NCES) reports the percentage of secondary school teachers of mathematics, English, social studies, fine arts, foreign language and special education in grades 7-12 who have a college major in their main teaching assignment. It is also important for elementary school teachers and teachers in other subject areas to know their subject matter well. But comparable state-by-state statistics on these teachers are simply not available. So we rely on the percentage for secondary teachers in selected areas as a reasonable indicator of the percentage of teachers who are well-prepared to teach the subject matter they are assigned to teach.

The *First in America* target is that North Carolina will be in the top ten states for the percentage of teachers teaching in their field. In 1993-94, the most recent year for which reliable comparative statistics are available, 66% of North Carolina's teachers were teaching in-field. This was above the national average of 63% but well short of the 72% currently required to place in the top ten. The state was tied for 22nd in state rankings. Nor had we made any significant progress from our score of 68% in the previous round of data collection in 1990-91.

Related Information and Perspectives

The percentage of teachers teaching in-field appears low both nationally and statewide. Less than two-thirds of all teachers nationally are teaching in-field at a time when academic standards are becoming more challenging. And the problem is actually worse than the NCES statistics reflect. These figures show the percentage of teachers whose main assignment is in the field in which they are teaching. But many teachers teach in their proper field for most of the time while teaching a class or two in another subject. When such part-time out-of-field teaching is multiplied across many teachers and many classes, it becomes a major problem. There is no reason to believe that this practice is proportionally worse in North Carolina than it is in other states. But the NCES statistics do understate the size of the problem across all states.

Some argue that teachers may be qualified to teach a subject without having an academic major in it. Yet even when teachers with either majors or minors in an academic field are considered teaching in-field, the percentage of in-field teaching for grades 7-12 rises nationally to only 82% for science, 77% for mathematics, and 78% for English/language arts.[8] While comparable statistics for North Carolina are not available, it is likely that the percentages do not rise much above the national average.

Nine of 10 NC teachers will engage in high quality professional development.

PERCENTAGE OF TEACHERS WHO REPORT THAT THEY HAVE PARTICIPATED IN HIGH QUALITY PROFESSIONAL DEVELOPMENT

Professional development — including workshops, training sessions, and other continuing education experiences — helps both to keep teachers in the profession and to promote improved performance.[9] Teachers need ongoing opportunities to rethink what they already know and do, and to gain new knowledge and skills. But to be effective, professional development must be of high caliber.[10] Traditional approaches are often criticized as ineffective because they lack connection to teachers' classrooms, are short-term, and provide little opportunity for teachers to collaborate with colleagues.[11]

Through a survey of over 900 teachers statewide, we asked whether the professional development they had experienced displayed a set of features thought to characterize high quality professional development. We asked teachers whether the professional development supported by their school:

- was planned according to school needs,
- was aligned with high standards,
- was useful for helping students to achieve high standards,
- was part of an ongoing, integrated professional development program,
- provided strategies to apply in the classroom,
- provided follow-up activities, and
- provided networking opportunities.

To be counted as reporting that he or she had participated in high quality professional development, a teacher had to say that their professional development experiences showed at least five of these seven characteristics to a moderate or great extent. That is, the professional development had to share most of the features commonly agreed to characterize good professional development, but not every one of them.

The *First in America* target is for 90% of North Carolina teachers to participate in high quality professional development. Our survey results show that the state is far from meeting this standard. By our decision rule, only about 56% of the state's teachers reported participating in high quality professional development last year.

Most teachers did report that the professional development supported by their school was planned according to school needs (76%), provided classroom strategies (72%), was aligned with high standards (76%), and was useful for helping students achieve high standards (74%).

But these percentages dropped when teachers were asked whether professional development was integrated, ongoing, and collaborative. Teachers were less likely to say that their school had an integrated professional development program (63%), that follow-up activities were provided (50%), or that networking opportunities were offered (38%). It is in these areas that professional development most needs upgrading.

In sum, according to our survey results, the teacher professional development supported by North Carolina's schools will have to improve sharply to meet the *First in America* target by 2010. Improvement will be needed across all seven features of good learning experiences for teachers. But the greatest needs are for more coherent, integrated programs that include opportunities to share information and ideas and to learn from colleagues within the school and others beyond the school and district.

Related Information and Perspectives

To gain additional perspective, we can compare North Carolina's teachers' responses to recent reports from teachers across the country.[12] North Carolina teachers were slightly above the national average for participation in professional development activities that are connected to classroom practice (72% NC, 68% US average) and for alignment with high standards (76% NC, 72% US average). They were at the national average (50%) for follow-up opportunities.

In addition to asking about the quality of the professional development teachers had engaged in, we also asked about its content. Responses to one particular question deserve special mention — whether teachers had participated in in-depth study of their subject field. Very few North Carolina teachers had done such in-depth study (30%), more

than 40 percentage points below the US average in 1998.[13] This finding is especially important in light of a recent review of research showing that teachers' professional development only improves student performance on tests when the professional development focuses substantially on the subject matter on which students are tested.[14]

NC will continue to lead the nation in the number of National Board Certified Teachers.

NUMBER OF TEACHERS ATTAINING NATIONAL BOARD CERTIFICATION

The National Board for Professional Teaching Standards (NBPTS) is an independent, nonprofit organization that has established standards for what experienced, accomplished teachers should know and be able to do, as well as an assessment process to determine whether candidates for certification actually meet the standards. A majority of Board members are currently practicing teachers recognized for the outstanding quality of their work.

According to the National Board, accomplished teachers:

- are committed to students and their learning,
- know the subjects they teach and how to teach those subjects to a broad range of students,
- take responsibility for managing and monitoring student learning,
- think systematically about their practice and learn from their experiences, and
- collaborate closely with colleagues and take an active role in the school and the community it serves.

Each of these five "core propositions" is spelled out in some detail in the Board's standards documents.

The Board has created an assessment process based on a combination of research about teaching, the professional judgment of good teachers, and technically sound measurement procedures. To undertake the assessment, a candidate must be a fully licensed practicing teacher with at least three years' teaching experience. Candidates for certification develop a portfolio that generally includes four entries, two of which include videotapes of their classroom teaching. The other two entries generally present and examine samples of their students' work. Teachers write extensive analyses of both their own teaching and students' work. They also undergo a full-day assessment of their subject matter knowledge and their knowledge about teaching. The assessment requires teachers to respond to questions about subject matter and teaching during four 90-minute sessions.

Board certified teachers estimate that the assessment process demands over a hundred and twenty hours of work above and beyond their normal duties. The great majority report learning more from close analysis of their teaching and their students' work than from any other professional development experience in their careers. The rigor of the assessment process is reflected in the passing rate. Nationwide, fewer than 45% of the teachers who go through the process receive a passing score on their first attempt.

The charge for the assessment process is $2,300. The teacher's entire portfolio — the lesson plans, videotapes of classroom instruction, student work samples, and analysis — is scored by other teachers who have undergone intensive training. The scoring is lengthy and complex, and most of the $2,300 fee is used to pay for it.

Many states offer incentives for teachers to become nationally certified. North Carolina has been at the forefront of these. The state pays teachers' fees to undergo assessment and rewards teachers attaining certification with a 12% salary increase.

The *First in America* target is to lead the nation in the number of teachers with National Board Certification. With the help of incentives, North Carolina has far outdistanced other states. In the past year it more than doubled the number of Board certified teachers — going from 536 to 1,262 — and continues to lead the nation. North Carolina now accounts for roughly one fourth of all teachers throughout the nation who have been board certified.

While North Carolina has already met the target in this area, maintaining the lead will be increasingly difficult as more and more states begin to defray the costs of Board assessment and to offer competitive salary increases for achieving certification. Further, Board certification has a five-year term limit. So currently certified teachers will need to renew their certification.

Laura Bilbro-Berry, 2000 North Carolina Teacher of the Year.

Related Information and Perspectives

The National Board expects that eventually, about 10% of all teachers will achieve this advanced certification. The Board encourages certified teachers not only to continue teaching in their own classrooms, but also to provide leadership to other teachers by modeling and explaining good practice, working alongside professors in university teacher education programs, mentoring young teachers, observing and consulting with colleagues, serving on school improvement and curriculum committees, organizing workshops and teacher study groups, and a broad range of other activities. The Board expects certified teachers to promote good teaching well beyond the limits of their own classrooms.

NC will be one of the top 10 states in the percentage of teachers with master's degrees.

PERCENTAGE OF TEACHERS WITH MASTER'S DEGREES

As we noted earlier, teachers' knowledge of the subject matter they teach, how students learn it, and how to teach it effectively to the full range of students has a major impact on how much their students learn. Whether teachers pass examinations on the subject matter they teach and on principles of teaching and learning provides some assurance that new teachers are adequately prepared. And the number of National Board Certified Teachers will become an increasingly useful indicator of whether we have a vanguard of highly accomplished teachers to set a visible standard for their peers. But what of the great majority of teachers who have moved beyond the novice level but are not yet certified at the highly accomplished level? What useful indicators of their knowledge and skill are available?

Ideally, one would like a direct measure of their knowledge. Unfortunately, we can find no such measures that permit comparisons of teachers' knowledge and skills across different states. One approximate measure that is available is each state's percentage of teachers with master's degrees. There is some evidence that the knowledge gained in master's programs has an impact on student performance in classrooms.[15] But there are grounds for skepticism, as well.[16]

In fact, such skepticism led the General Assembly in 1997 to mandate in the *Excellent Schools Act* that all existing master's degree programs for teachers be scrapped and replaced by new, more "advanced" programs. The new programs, which came on line this academic year, place stronger emphasis on subject matter and the teaching and learning of that subject matter. Thus, over the next decade, the percentage of NC teachers with master's degrees should become a better and better indicator of their capacity to teach effectively. The *Excellent Schools Act* also provided that teachers who earn the new master's degrees would get a 10% salary increase. The incentive should prove adequate to persuade more teachers to pursue the new degrees. As they do, it would be logical to expect an impact on student learning.

So we report the percentage of teachers with master's degrees as the best available approximation to what we would most like to report. It does help measure teachers' overall level of education, and it seems safe to say that most parents would prefer for their children to be taught by more rather than less well-educated teachers.

The *First in America* target is for North Carolina to be one of the top ten states in the percentage of teachers with master's degrees. In the 1993-94 report — the most recent year for which reliable cross-state data are available — only 36% of North Carolina's teachers held master's degrees, which placed the state at 40th in the nation. That represented a one percent drop from the previous report, for 1990-91, not a statistically significant change in the data from this survey of a sample of NC teachers. The national average for teachers with master's degrees was 47%. Approximately 20% more of North Carolina's teachers must earn master's degrees to boost the state into the top ten.

95 percent of NC teachers will remain in the teaching profession from one year to the next.

PERCENTAGE OF TEACHERS WHO REMAIN IN THE TEACHING PROFESSION

Keeping good teachers is especially important in a time of teacher shortage. Many North Carolina districts already face acute shortages of qualified teachers. The shortage is certain to grow worse. At the same time that the children of the baby boom echo are working their way through school and newcomers are entering the state in record numbers, we are losing many young teachers. And a growing proportion of teachers are reaching an age when retirement is at least an option.

Nationwide, approximately 30% of new teachers leave the profession within the first three years.[17] North Carolina's schools lose a similar proportion. Teaching is an extremely demanding job, one that is mastered only through experience. To help new teachers cope with these challenges, the *Excellent Schools Act of 1997* instituted a mentorship program. An experienced mentor is assigned to each new teacher. But simply assigning a mentor may not be enough. An Ad Hoc Committee on Teacher Quality appointed by the State Board of Education has recently identified some problems with the mentorship program. Just recruiting and training mentors with the appropriate background for each new teacher is difficult. In addition, the normal duties of their own teaching leave mentors with too little time to give adequate attention to their younger colleagues. For these and other reasons, the state's schools continue to lose many young teachers.

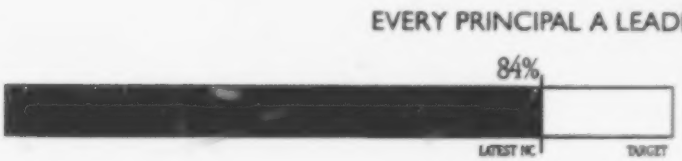
Experienced teachers who leave the classroom represent a double loss. In neighboring Tennessee, data collected through the state's assessment system shows that teachers' effectiveness grows steadily through about ten years of experience before leveling off.[18] Similar analyses of North Carolina data are not available, but there is no reason to believe the pattern is very different on this side of the Tennessee border. Experienced teachers are valuable both in their own classrooms and as mentors to younger teachers. So our experienced teachers represent an important resource in the drive to become *First in America*.

A final reason why it is important to keep teachers in the classroom is that rapid turnover in a school tends to depress students' test scores. Turnover is generally greatest in schools serving high percentages of poor and minority students. So turnover has a disproportionate effect on the least advantaged students.[19] As the state attempts to eliminate the achievement gap between white and minority students, we cannot tolerate situations that actually widen the gap.

For all of these reasons, local school districts must minimize the loss of teachers now in our schools. Thus, the *First in America* target is for NC schools to retain 95% of their teachers from one year to the next. From 1994 to 1995, NC schools retained approximately 93% of their teachers, as did schools nationally. But in recent years, the loss rate has worsened. From 1997-98 to 1998-99, 88% of teachers remained in the profession. From 1998-99 to 1999-2000, only 87% of the state's teachers continued to teach in North Carolina schools.

The primary reason for the drop in teacher retention was an increase in retirements. To some extent, this is simply a product of demographic trends. As is true nationally, North Carolina has a large wave of teachers reaching retirement age. But age alone no longer dictates the time of retirement. New incentives to remain might persuade more experienced teachers to remain in the profession for a few more years. Strong measures to keep experienced teachers, as well as the new who leave in large numbers, will be necessary if our schools are to stem the tide of loss.

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK
Changes: ⬆ North Carolina's score was significantly better. / ⬇ North Carolina's score was significantly worse. / ⬌ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.		
EVERY PRINCIPAL A LEADER		
• NC principals will score at or above the national average on principal examinations.	Average examination scores of NC principals	SCHOOL LEADERS LICENSURE ASSESSMENT: LATEST NC SCORE: 177 — PRIOR NC SCORE: 156 — CHANGE: ⬆ — US AVERAGE: 173
• Nine of 10 teachers and parents will agree that their principal demonstrates characteristics of effective leadership.	Teacher and parent perceptions of their principal's leadership	LATEST NC SCORE: TEACHERS: 48% — PARENTS: 74%



Principal leadership has long been recognized as a key to school performance.[28] In fact, assigning a new principal is among the most common prescriptions for turning a low performing school around.

Yet it is difficult to gauge the overall quality of principal leadership in a state. We have chosen two measures. The first is a new test for beginning principals developed under the auspices of the Council of Chief State School Officers, the principle national association for state school superintendents. The second combines the judgments of two groups in a position to know about the performance of the principal in their school — teachers and parents.

The "scores" are mixed. New NC principals surpass the national average on the test for beginning principals, though as we note, only a few states use the examination at present. Parents also rate their principals fairly favorably. But by the tough standard we set to count a teacher as deeming his or her principal effective, teachers gave only about half of their principals (48%) a favorable rating. On average, across these different measures, principals' performance level is at about 84% of the target level set for them. In other words, the net effect of the differing scores on these measures is to grade principals at the equivalent of a B (84%).

NC principals will score above the national average on principal examinations.

AVERAGE EXAMINATION SCORES OF NC PRINCIPALS

Beginning principals in North Carolina are required to pass the School Leaders Licensure Assessment (SLLA). The assessment is based on professional standards for school administrators established by a 24-state consortium, the Interstate School Leaders Licensure Consortium (ISLLC). The ISLLC standards rely heavily on research that seeks to establish links between quality school leadership and student achievement. The standards also reflect recent changes in American society and the challenges these changes pose for schools. School administrators work in schools that are becoming more diverse racially, linguistically, and culturally, and in an economy that is increasingly reliant on technology. The principles underlying the ISLLC standards thus include a focus on:

- the centrality of student learning,
- the changing role of the school leader,
- the collaborative nature of school leadership, and
- the importance of access, opportunity, and empowerment for all members of the school community.

The standards define in some detail the knowledge and characteristics that a principal must have in order to succeed. The standards also include a performance component that describes what principals must do to meet each standard.

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The assessment itself is currently used in only five member states (Kentucky, Maryland, Mississippi, Missouri, and North Carolina). The number of states using the test is expected to rise steadily over the next few years. The

assessment lasts six hours. Test-takers read and respond to 18 vignettes that focus on issues involving curriculum and instruction as well as supervision, management, school law, and safety concerns. Test-takers also read two cases that describe significant school-based issues and then make judgments about appropriate administrative actions. In addition, they are asked to analyze documents the typical principal would deal with often, such as data on student achievement, committee reports, memos, and test-score reports.

The target is for principals to score above the national average on principal examinations. ETS will not release other states' scores, but will provide a median score for all test-takers in the nation. North Carolina has made substantial progress on the assessment and now has met the *First in America* target. In 1998-99, North Carolina principals scored 177. This score surpassed the US median of 173. The 1998-99 median score of 177 was much higher than the score of 156 from the previous year.

Nine of 10 NC teachers and parents will agree that their principal demonstrates characteristics of effective leadership.

TEACHER AND PARENT PERCEPTIONS OF THEIR PRINCIPAL'S LEADERSHIP

The second set of principal leadership measures we used are teachers' and parents' perceptions of the principal at the school where they work or which their child attends.

We did not simply ask for a general impression of the principal's effectiveness. Rather, we used an expert panel to define what a principal must do or be like in order to provide good leadership. The panel included current and former principals, superintendents, teachers, the directors of two university-based programs for principals, and the director of a respected non-profit organization that has shaped education policy in the state for many years. The panel began with the standards set by the Interstate School Leadership Licensure Consortium and the specific behaviors and characteristics that spell out what the standards really mean. Through an extended process of computer-based discussion and voting, the panel settled on fourteen important behaviors and characteristics. According to the panel, an effective principal:

- leads the development of the school's vision,
- uses the school vision to guide day-to-day decisions,
- treats people fairly, equitably, and with dignity and respect,
- leads the development of programs to meet the needs of all students,
- accurately identifies barriers to student learning,
- promotes professional development that focuses on improving student learning,
- is visible and involved in the school and its activities,
- is accessible to teachers in the school,
- communicates well with a variety of audiences inside and outside of the school,
- solves problems and conflicts effectively,
- recruits and works to keep a high quality work force,
- uses resources (for example, money, materials, and people) where they matter most,
- uses data to identify the strengths and weaknesses of the school's instructional programs, and
- uses multiple sources of data (for example, student absenteeism, dropout rates, and parental input) to measure school performance.

To be counted as saying that his or her principal demonstrates effective leadership, a teacher had to agree or agree strongly with twelve of these fourteen statements. This rigorous standard was based on three considerations. First, most members of the panel who identified the fourteen key principal leadership behaviors believed that an effective principal should be rated highly on approximately twelve of the fourteen. A second factor was the "80-20 rule," a rule of thumb often invoked by thinkers about leadership. As its name implies, the 80-20 rule says that if a leader handles 80% of the major tasks effectively, the remaining 20% will take care of themselves or diminish in importance. A third consideration was our overall grading scheme for performance on *First in America* indicators. A favorable rating on twelve of the fourteen characteristics would give the principal a "grade" of 86, a B. We believed it

seemed reasonable to assume that a teacher who believes his or her principal is effective would give the principal no lower grade than B.

We asked parents to comment on only those behaviors or characteristics that they would be likely to observe directly. These included the items about fairness and respect, visibility and involvement, communication with parents, and problem solving. To be counted as saying that their principal demonstrates effective leadership, parents had to agree or agree strongly with three of the four statements. A favorable rating on three out of four (75%) is not quite a B, but it seemed unreasonable to insist upon a perfect "score" for a parent to be counted as rating a principal's leadership effective.

The target for this indicator is that 9 of 10 teachers and parents will report that their principal demonstrates effective leadership. Results from our survey of over 900 teachers and over 500 parents show that we are well short of the target. Less than half (48%) of teachers agreed or agreed strongly with at least twelve of the fourteen statements. Thus, by our decision rule, only 48% of teachers said their principal demonstrates effective leadership. This contrasts with the 74% of parents who agreed or agreed strongly with at least three of the four statements they were asked about. Parents seem to evaluate their principal more favorably than do teachers.

These results seem disappointing, but they are somewhat difficult to interpret. No comparable data from other states or other years are available. Until data from several years accumulate, and until other states begin to ask similar questions about their principals, the results should be interpreted with caution.

To gain some perspective on the data at this point, it may be useful to examine the results on specific characteristics. Over 70% of teachers say their principal leads the development of a vision for the school (77%), promotes professional development focused on improving student learning (74%), is visible and involved in school activities (73%), is accessible to teachers (75%), uses data to identify strengths and weaknesses (73%), and uses several sources of data to measure school performance. Principals fall below 60% — our standard for a failing grade — on only one characteristic, solving problems and conflicts (57%). Overall, an average of 69% of teachers rated their principals favorable on a given characteristic.

Turning to parents' views, 78% of parents agreed or strongly agreed that their principal treats people fairly and with respect. Eighty four percent (84%) said the principal is visible and involved in the school. Seventy five percent (75%) believed the principal communicates well with parents and others. And 70% said that their principal solves problems and conflicts effectively. On average, over three quarters (77%) of parents agreed with a given statement about their principal.

In general, then, teachers and parents do rate their principals favorably on the major features of effective principal leadership. But they do not rate them highly enough to meet the standard we have set. There is considerable room for improvement across the board, but the area that seems to need most attention is leadership in solving problems and resolving conflicts.

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK
Changes: ⬆ North Carolina's score was significantly better / ⬇ North Carolina's score was significantly worse / ⬌ Interpret North Carolina's score with caution — change was not significant / * On this indicator a lower score is better, a higher score is worse.		
EVERY SCHOOL A GOOD PLACE TO WORK AND LEARN		
• Nine of 10 teachers and administrators will say that their school is a good place to work and learn.	Teacher and administrator perceptions of their work environment	LATEST NC SCORE: TEACHERS 58% PRINCIPALS 57%
• NC schools will rank among the top 10 states in the percentage of the annual education expenditures allocated to instruction.	Percentage of annual education expenditures allocated to instruction	LATEST NC SCORE: 65% · PRIOR NC SCORE: 62% · CHANGE: ⬌ · NC RANK: Tied for 12th · US AVERAGE: 62% · TARGET SCORE: 64% · FIRST: 60% (97)
• NC will rank in the top 10 states in teacher compensation.	Average salaries of NC's teachers	LATEST NC SCORE: $39,220 · PRIOR NC SCORE: $36,098 · CHANGE: ⬆ · NC RANK: 25rd · US AVERAGE: $41,179 · TARGET SCORE: $47,041 · FIRST: $32,174

EVERY SCHOOL A GOOD PLACE TO WORK AND LEARN

No matter how knowledgeable and skillful teachers and principals may be, they can do their best work only if the school provides the right supports and presents few obstacles to good work. Educators must have support from parents, colleagues, and superiors. Paperwork and inappropriate rules must not get in the way. For morale and motivation to stay high, teachers and principals must feel adequately compensated and recognized. And resources must be put where they make a difference for children's learning — into instruction.

While North Carolina teachers' salaries have improved substantially over the past few years, and resources do seem well targeted to instruction in the state, teachers remain sharply dissatisfied with their compensation, as well as with other aspects of their work environments. Principals are somewhat more satisfied, but significant concerns remain for them, as well.

Nine of 10 teachers and administrators will say that their school is a good place to work and learn.

TEACHER AND ADMINISTRATOR PERCEPTIONS OF THEIR WORK ENVIRONMENT

Even well-qualified teachers and administrators cannot perform effectively in environments that do not support their work and provide opportunities for professional growth and advancement. Further, poor work environments drive many teachers out of teaching.[8] There is no reason to believe otherwise for administrators.

To gauge the quality of schools as places to work and learn, we asked a statewide sample of over 900 teachers and 400 principals whether staff in their school share beliefs and values and work cooperatively, whether recognition, compensation, and professional autonomy support good work, whether rules and paperwork get in the way of good work, and whether class sizes and parental support are satisfactory.

More specifically, we asked teachers to respond to the following statements about their school:

- Most of my colleagues share my beliefs about what the central mission of the schools should be.
- There is a great deal of cooperative effort among the staff members.
- Paperwork interferes with my job of teaching.
- Staff members are recognized for a job well done.
- I have to follow rules in this school that conflict with my best professional judgment.
- I am satisfied with the size of my classes.
- I have the autonomy to make classroom decisions that are in the best interests of my students and their learning.
- In the past few years, I feel that my salary has improved substantially.

- Compared to other professionals with similar education and work requirements, I feel that I am reasonably compensated.
- I receive a great deal of support from parents for the work I do.

We also asked how satisfied they were with their opportunities for professional development and professional advancement. We asked principals about a set of similar statements, modified to suit their role.

To be counted as saying that her or his school is a good place to work and learn, a teacher or principal had to weigh in positively (agree or agree strongly, or be satisfied or very satisfied) with 8 out of these 12 items (or disagree with the statements about interfering paperwork and rules).

Teachers' and principals' responses show that our schools do not come close to the *First in America* target: that 9 of 10 teachers and principals will say their school is a good place to work and learn. By the standard we set (agreement with 8 of the 12 statements), only 38% of NC teachers said their school is a good place to work and learn.

The *First in America* survey found that the areas of greatest concern are compensation, recognition, and paperwork. Since 1996-97, the average NC teacher's salary has risen by more than 25%, to or above the national average. North Carolina now ranks 23rd among the states. In figures that take the regional cost of living into account, the state ranks 18th in teacher salaries. Nevertheless, only about 35% of the teachers in our sample said that their salaries had improved substantially. Fewer than 1 in 10 (9%) believe they are paid on a par with others in jobs with similar education and work requirements. Only a little more than half of the teachers (54%) said that staff are recognized for a job well done. Nearly three quarters (73%) said that paperwork interferes with their teaching.

On the positive side, a much larger percentage of teachers feel they are surrounded by like-minded colleagues (77%) who share in cooperative efforts (65%). About three quarters believe they have the autonomy to make good classroom decisions (75%), unimpeded by troublesome rules (80%). Teachers are also reasonably satisfied with their opportunities for professional advancement (65%), professional learning or development (76%), and the support they get from parents (76%).

Despite these offsetting positive factors, the headline here is that teachers clearly feel poorly compensated, both in dollars and in personal recognition. It appears that teachers' expectations are outpacing their salary growth. Or perhaps the growing pressures of teaching are tipping the scales against satisfaction with their pay. Whatever the explanation, with a growing proportion of teachers approaching an age when retirement is an option, a strong economy offering more alternatives to younger teachers, and a worsening teacher shortage, these numbers offer cause for concern — perhaps even for alarm.

Though still far from the target figure of 9 of 10, the work environment picture is considerably brighter for principals. Nearly three out of five (57%) saw their school as a good place to work and learn. Though like teachers, they do not feel reasonably compensated (only 18% agreed), half do feel they have made progress financially (50%). Their belief that they make a practice of recognizing people for a job well done (95%) contrasts sharply with teachers' perceptions (only 54% of teachers agreed).

Like teachers, principals feel surrounded by colleagues who share their beliefs (93%) and work cooperatively (89%). Only about a fifth (21%) say they have to follow troublesome rules, and nearly three quarters (74%) believe they have the latitude to make decisions based on what is good for students. They are even more satisfied than teachers with their opportunities for professional advancement (80%) and professional development (82%). But, they feel a little less supported by parents (65% of principals versus 76% of teachers), and a little less satisfied with the size of classes in their school (46% of principals versus 54% of teachers).

Though some concerns about compensation remain, principals are generally much more satisfied with their schools as work environments than are teachers.

NC schools will rank among the top 10 states in the percentage of annual education expenditures allocated to instruction.

PERCENTAGE OF ANNUAL EDUCATION EXPENDITURES ALLOCATED TO INSTRUCTION

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As noted in the discussion of education finance later in this report, the Governor and his Education Cabinet chose to set the *First in America* goals mainly in terms of the results they want to see the state achieve rather than in terms of

the expenditures necessary to achieve them. Put another way, they want to outperform other states, not simply to outspend them. But some goals and priorities do represent strategies for getting to *First* — getting kids ready for school, hiring and keeping good teachers, strengthening support from families, communities, and businesses.

This indicator — the percentage of annual expenditures allocated to instruction — represents one such strategy. Education expenditures are typically broken down into three areas:

- Instruction — teachers' salaries and benefits, supplies that support instruction (e.g., textbooks), and purchased services.
- Support services — operation and maintenance of buildings, school administration, transportation, and other student and school support activities (e.g., student counseling, library, and health services).
- Non-instructional activities — school meals and enterprise activities (e.g., bookstores).

The states that lead the nation in mathematics and reading achievement spend a larger percentage of their expenditures on instruction than the national average.[28]

The *First in America* target is to rank among the top ten states in the percentage of expenditures allotted to instruction. The state has made progress. NC was tied for 17th in the 1996-97 report with 62 percent of expenditures devoted to instruction. In 1997-98, North Carolina moved into a tie for 12th with 63 percent. The national average was 62 percent. Most states are tightly packed around the national average. In all states, instruction absorbs the majority of expenditures.

To make it into the current top ten, North Carolina's percentage would have to reach 64%, where three states are now tied (Connecticut, Hawaii, and Pennsylvania). Though reaching the top ten seems within sight, getting there will require a significant commitment. NC spent a total of about $6.5 billion on public elementary and secondary schools in 1997-98. Assuming total spending remains constant, a one percent increase in spending on instruction amounts to a $65 million dollar reallocation.

NC will rank in the top 10 states in teacher compensation.

AVERAGE SALARIES OF NC'S TEACHERS

In times like these when well-paying jobs are plentiful, the problem of attracting and retaining talented people in teaching grows more severe. As the earlier section on teacher retention suggested, higher salaries alone will not improve the quality of teachers nor keep teachers in the classroom. But it should help. Low pay is a frequently cited reason that teachers leave teaching.[29]

Some states have been able to attract and retain an adequate supply of teachers while also improving the quality of teachers. These states have linked increases in salaries to more stringent licensure standards.[30] North Carolina is one of the states that has both raised teacher salaries and introduced higher professional standards. In the mid-1980s, the state raised teacher salaries. In the late 1990s, the state set out to raise salaries again, allocating $239 million last year as the third part of a four-year effort to bring teacher salaries to the national average.[31]

The *First in America* target is to rank in the top ten states in teacher compensation. The state has made substantial progress but remains well short of this goal.

Annually, both the National Education Association (NEA) and the American Federation of Teachers (AFT) publish estimated average salary figures for each state and for the nation as a whole. To set his goals for moving NC teachers' salaries to the national average and to track progress from year-to-year, Governor Hunt used figures from the NEA. We also rely primarily on NEA figures.

SCHOOL YEAR	AVERAGE NC SALARY	AVERAGE NATIONAL SALARY	NC RANK
1996-97	$31, 286	$38, 611	43rd
1997-98	$33,129	$[illegible],454	38th
1998-99	$36,898	$40,582	29th
1999-2000	$39,220	$41,179	23rd

Source: National Education Association

The table at the right shows how North Carolina's teacher salaries, the national average teacher salary, and North Carolina's rank have changed over the past four years. The gap between North Carolina's average salary and the national average has shrunk steadily, and North Carolina's ranking has risen, as well.

Based on preliminary NEA figures for the 1999-2000 school year, North Carolina has reached the rank of 23rd in the nation for teacher salaries. This is above the middle-ranking state. Yet North Carolina's average teacher salary of $39,220 is below the US average salary of $41,179 and well below the salary required to make it into the present top ten, $47,041.

Nor will the top ten stand still. Over the past few years, the national average has risen by about $1,000 per year. Thus, to make the top ten, North Carolina will need not simply to increase salaries, but to continue to outpace other states in doing so.

In sum, the state has made real progress toward the top ten but still finds itself in the middle of the pack, not among the leaders in making teaching a financially viable profession.

Related Information and Perspectives

OCCUPATION	US MEAN SALARY
Teacher	$40,574
Accountant III	$49,257
Buyer/Contract Specialist III	$57,392
Attorney III	$69,104
Computer Systems Analyst III	$66,782
Engineer IV	$68,294
Full Professor (Public Doctoral University)	$78,830
Assistant Professor (Public Comprehensive University)	$41,940

Source: AFT Survey and Analysis of Salary Trends, 1999

As indicated above, we used figures from the NEA in computing the state's current performance on the teacher compensation target. But the American Federation of Teachers (AFT) also collects and reports figures on teacher compensation, as well as some useful cost-of-living adjustments. Looking at teacher salaries with a cost-of-living adjustment provides another useful perspective. The AFT has developed a cost-of-living index that allows us to compare what teachers make in each state once the cost of living is taken into account.* For example, teachers' actual average salary in Alaska is higher than teachers' salaries in North Carolina. But once the cost-of-living is taken into account, North Carolina's average teacher salary is higher than Alaska's.

Using the cost-of-living adjustment, in 1996-97 North Carolina paid its teachers an adjusted salary of $33,905 and ranked 40th in the nation. The adjusted NC salary was considerably below the U.S. average of $38,400. In 1998-99, the state had moved up 22 spots to 18th in the nation in adjusted salary terms. North Carolina's adjusted average teacher salary was $40,124 dollars, only $400 dollars below the U.S. average of $40,574 dollars and only about $2,350 below the 10th ranked state's adjusted salary of $42,479.

Still another way to get a sense of how good or bad teachers' salaries are is to compare them with salaries for other white collar occupations, as in the table at the left for 1999. According to the AFT, the average North Carolina teacher salary for 1998-99 was $36,883.

Some argue that to make the comparison more accurate, the figures for teachers' salaries should be adjusted for their shorter work year. It would be difficult to make precise adjustments. But assuming that most jobs entail an 11 month work year (with a month's vacation) and that teachers work 10 months, for purposes of fair comparison the figures for teachers should be adjusted upward by 1/10. This would put teachers' salaries at $44,631 for the US as a whole and at $40, 571 for North Carolina. This closes the gaps somewhat, but both the national and the NC average would remain below the average for all of the other occupations, including an Accountant III, a position requiring a similar level of education (*see box at left*).

Quality Teachers and Administrators: Summary of Performance

Measured against the *First in America* performance targets set by the Education Cabinet, the state currently rates a B- (83%) on the goal of assuring *Quality Teachers and Administrators* in every school and classroom. This grade combines measures of performance for three separate priorities. The priorities and the performance levels for each are these:

- *Every Teacher Caring, Competent, and Qualified* (87%),
- *Every Principal a Leader* (84%), and
- *Every School a Good Place to Work and Learn* (78%).

Thus, North Carolina is about 87% of the way to the targets for caring, competent, and qualified teachers. We have not assigned grades at the level of individual priorities within a goal, but if we had, the grade for teachers would be a high B. Turning to principals, the state is about 84% of the way to the *First in America* targets. Thus principals, too, would earn a B. But the state is not doing as good a job at assuring that teachers and principals are working within an environment that supports high performance. The schools are only about 78% of the way to the targets for that priority — the equivalent of a C+.

Within each of the priorities, where is the state doing well, and where are the big needs for improvement?

On the teacher priority, the state is leading the nation in the number of National Board Certified Teachers — teachers who have passed a year-long assessment process devised by a national board of expert educators and policy makers. Our new teachers score reasonably well on tests of subject matter knowledge and knowledge about teaching. The percentage of NC teachers who have passed all requirements for licensure is just above the national average, as was the percentage of teachers who are assigned to teach what they are licensed to teach. Compared with districts nationally, NC school districts are doing a good job of keeping the teachers they have, an important achievement in this time of worsening teacher shortages. But the professional development that school districts are organizing for teachers does not rate so highly — only a little more than half of NC teachers judge the professional development to be of high quality. And far too few teachers are getting the opportunity to study the subject matter they teach in greater depth. Nor do a large enough percentage of NC teachers have master's degrees — a little more than a third, which puts us 40th in the nation.

On the principal leadership priority, new principals are scoring a little better than their counterparts on a new test that is now used in NC and a handful of other states. And nearly three quarters of parents give their principals a favorable rating. But by our tough standard for effectiveness, only about half of teachers rate their principals effective leaders. Principals do get relatively good marks in some areas, such as leading the development of a vision for the school and using it to guide daily decisions. But there is room for substantial improvement in several areas, most prominently in solving problems and resolving conflicts effectively.

It is the priority on making schools good places to work and grow professionally that pulls down the overall score on the *Quality Teachers and Administrators* goal. North Carolina allocates a relatively high percentage of its total expenditures to instruction, where resources seem likely to do the most for students. And the state has nearly risen to the national average in teacher salaries. But only a little more than a third of teachers and one half of principals say their school offers a good work environment. Though salaries have improved substantially, strong dissatisfaction with compensation remains. Nor do teachers feel adequately recognized for a job well done. While both teachers and administrators feel that they work with committed colleagues who share their goals and values, there is considerable room for improvement in schools as environments for educators to perform up to their capabilities.

To reach the goal of *Quality Teachers and Administrators* in schools all across the state, North Carolina must improve professional development, increase the number of teachers pursuing master's degrees, strengthen principals' ability to solve problems and resolve conflicts, continue to improve compensation, and make schools more supportive of peak performance by both teachers and principals.

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[1] See, for example, William L. Sanders and June C. Rivers, *Cumulative and Residual Effects of Teachers on Future Student Academic Achievement* (Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center, 1996), 7.

[2] Linda Darling-Hammond, *Teacher Quality and Student Achievement: A Review of State Policy Evidence* (New York: Center for the Study of Teaching and Policy, 1999).

[3] Lynn Olson, "Finding and Keeping Competent Teachers," Education Week, *Quality Counts 2000: Who Should Teach?* (Bethesda, MD: Education Week, 2000), 12-18.

[4] C. Druva and R. Anderson, "Science Teacher Characteristics by Teacher Behavior and by Student Outcome: A Meta-Analysis of Research," *Journal of Research in Science Teaching* 20, no.5 (1983): 467-479; Parmalee Hawk, Charles Coble, and Melvin Swanson, "Certification: It Does Matter," *Journal of Teacher Education* 36, no. 3 (1985): 13-15; David Berliner, "In Pursuit of the Expert Pedagogue," *Educational Researcher* 15 (1986): 5-13; Ronald Ferguson, "Paying for Public Education: New Evidence on How and Why Money Matters," *Harvard Journal on Legislation* 28 (1991): 465-498; U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *1992 and 1994 NAEP National Reading Assessments – Data Almanac – Grade 4: Teacher Questionnaire Weighted Percentages and Composite Proficiency Means (Public School)*, available from http://www.nces.ed.gov/nationsreportcard/y2/alm/almanac.shtml; U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *1992 NAEP Trial State Assessment* (Washington, DC: NCES, 1994); D. Wiley and B. Yoon, "Teacher Reports of Opportunity to Learn: Analyses of the 1993 California Learning Assessment System," *Educational Evaluation and Policy Analysis* 17, no. 3 (1995): 355-370; Ronald Ferguson and Helen Ladd, "How and Why Money Matters: An Analysis of Alabama Schools," in Helen Ladd, ed., *Holding Schools Accountable* (Washington, DC: Brookings Institute, 1996), 265-298; J. Sikula, ed., *Handbook of Research on Teacher Education*, 2d ed. (New York: Association of Teacher Educators, 1996); S. Paul Wright, Sandra Horn, and William Sanders, "Teacher and Classroom Context Effects on Student Achievement: Implications for Teacher Evaluation," *Journal of Personnel Evaluation in Education* 11 (1997): 57-67; Ronald Ferguson, "Teachers' Perceptions and Expectations and the Black-White Test Score Gap," in Christopher Jencks and Meredith Phillips, eds., *The Black-White Test Score Gap* (Washington, DC: Brookings Institute, 1998), 273-317; Darling-Hammond, *Teacher Quality and Student Achievement: A Review of State Policy Evidence*.

[5] A. Bradley, "The Gatekeeping Challenge" Education Week, *Quality Counts 2000: Who Should Teach?* (Bethesda, MD: Education Week, 2000), 22-24, 26.

[6] Carolyn Everton, Willis Hawley, and M. Zlotnik, "Making a Difference in Educational Quality Through Teacher Education," *Journal of Teacher*

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Education 36, no. 3 (1985): 2-12; Hawk, Coble, and Swanson, 13-15; U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *1992 NAEP Trial State Assessment*; National Commission on Teaching and America's Future, *What Matters Most: Teaching for America's Future* (New York: NCTAF, 1996); Georgia State University Applied Research Center, Council for School Performance, *Teachers with Advanced Degrees Advance Student Learning* (Atlanta, GA: GSU, 1997); M. Fetler, "High School Staff Characteristics and Mathematics Test Results," *Education Policy Analysis Archives* 7 (1999), available from http://epaa.asu.edu; E. Fuller, *Does Teacher Certification Matter? A Comparison of TAAS Performance in 1997 Between Schools with Low and High Percentages of Certified Teachers* (Austin, TX: Charles A. Dana Center, University of Texas at Austin, 1999); Dan D. Goldhaber and Dominic Brewer, "Does Teacher Certification Matter? High School Teacher Certification Status and Student Achievement," *Educational Evaluation and Policy Analysis* 22, no. 2 (2000), 129-145. Goldhaber and Brewer reported in their 2000 *Educational Evaluation and Policy Analysis* article that high school mathematics and science teachers with emergency credentials produce student test results as good as those produced by their fully-licensed counterparts. But some scholars challenge this finding. They point out that the Goldhaber and Brewer claim was based on a very small subsample of teachers in data from the National Educational Longitudinal Study of 1988 (24 science teachers and 34 math teachers out of the total sample of 3,469 science and math teachers), that teachers in the subsample actually had qualifications very similar to those of licensed teachers (teachers with "standard certification"), and that those with more training in education produce better results than those who lack such training. They argue that overall, Goldhaber and Brewer found strong and consistent evidence that, as compared with students whose teachers are uncertified, students achieve at high levels in mathematics when they have teachers who hold standard certification in mathematics, and that the same was true to a somewhat lesser extent in science.

[f] Druva and Anderson, 467-479; Hawk, Coble, and Swanson, 13-15; Lee Shulman, "Knowledge and Teaching: Foundations of the New Reform," *Harvard Educational Review* 57 (1987): 1-22; Linda Darling-Hammond, "Teaching and Knowledge: Policy Issues Posed by Alternative Certification for Teachers," *Peabody Journal of Education* 67, no. 3 (1992): 123-154; National Commission on Teaching and America's Future; David Monk, "Subject Matter Preparation of Secondary Mathematics and Science Teachers and Student Achievement," *Economics of Education Review* 13, no. 2 (1994): 125-145; David Monk and J. King, "Multi-level Teacher Resource Effects on Pupil Performance in Secondary Mathematics and Science: The Role of Teacher Subject-Matter Preparation," in R. Ehrenberg, ed., *Contemporary Policy Issues: Choices and Consequences in Education* (Ithaca, NY: ILR Press, 1994), 29-58; Dan D. Goldhaber and Dominic Brewer, "Evaluating the Effect of Teacher Degree Level on Educational Performance," in W. Fowler, Jr., ed., *Developments in School Finance, 1996* (Washington, DC: National Center for Education Statistics, U.S. Department of Education, 1997), 197-210; Goldhaber and Brewer, "Does Teacher Certification Matter? High School Teacher Certification and Student Achievement," 129-145.

[g] U.S. Department of Education, National Center for Education Statistics, *Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers* (Washington, DC: NCES, 1999).

[h] U.S. Department of Education, National Center for Education Statistics, *Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers*; Norman Sprinthall, Alan Reiman, and Lois Theis-Sprinthall, "Teacher Professional Development," in J. Sikula, T. Buttery, and E. Guyton, *Handbook of Research on Teacher Education* (New York: Simon and Schuster Macmillan, 1996), 666-703.

[i] J. W. Little and M. McLaughlin, eds., *Teachers' Work: Individuals, Colleagues, and Contexts* (New York: Teachers College Press, 1993); David Cohen and Heather Hill, *Instructional Policy and Classroom Performance: The Mathematics Reform in California*, paper presented at the annual meeting of the American Educational Research Association (Chicago, IL, 1997); W. Hawley and L. Valli, "The Essentials of Effective Professional Development," in Linda Darling-Hammond and Gary Sykes, eds., *Teaching as the Learning Profession* (San Francisco, CA: Jossey-Bass, 1999), 127-150.

[j] Michael Fullan, *The New Meaning of Educational Change* (New York: Teachers College Press, 1991); U.S. Department of Education, National Center for Education Statistics, *Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers*; U.S. Department of Education, National Center for Education Statistics, *Teachers' Tools for the 21st Century: A Report on Teachers' Use of Technology* (Washington, DC: NCES, 2000), 3-4.

[k] U.S. Department of Education, National Center for Education Statistics, *Status of Education Reform in Public Elementary and Secondary Schools: Teachers' Perspectives* (Washington, DC: NCES, 1998).

[l] Georgia State University Applied Research Center, *Statistical Report for the First in America Teachers' Survey* (Atlanta, GA: GSU, 2000); U.S. Department of Education, National Center for Education Statistics, *Teacher Quality: A Report on the Preparation and Qualifications of Public School Teachers*, 22.

[m] Mary M. Kennedy, *Form and Substance in Inservice Teacher Education* (Madison, WI: National Institute For Science Education, University of Wisconsin, 1998)

[n] Ferguson, "Paying for Public Education: New Evidence on How and Why Money Matters," 465-498; Ferguson and Ladd, 265-298.

[o] Darling-Hammond, *Teacher Quality and Student Achievement: A Review of State Policy Evidence*.

[p] Olson, 12-18.

[q] William Sanders, personal communication, September 2000.

[r] Linda Darling-Hammond, "Inequality and Access to Knowledge," in James Banks, ed., *Handbook of Research on Multicultural Education* (New York: Macmillan, 1995); Darling-Hammond, *Teacher Quality and Student Achievement: A Review of State Policy Evidence*.

[s] Bess Keller, "Principal Matters," *Education Week* 11 (1998): 25-27; Thomas Sergiovanni, *The Principalship: A Reflective Practice Perspective* (San Francisco, CA: Jossey-Bass, 2000); Michael Fullan, ed., *The Jossey-Bass Reader on Educational Leadership* (San Francisco, CA: Jossey-Bass, 2000).

[t] Olson, 12-18.

[u] Darling-Hammond, *Teacher Quality and Student Achievement: A Review of State Policy Evidence*.

[v] Public Schools of North Carolina and The Center for Urban Affairs and Community Development at North Carolina State University, *1996 Teacher Turnover: A Report of Three Studies Conducted for the State Board of Education* (Raleigh, NC: NCDPI, 1996); U.S. Department of Education, National Center for Education Statistics, *America's Teachers: Profile of a Profession, 1993-94* (Washington, DC: NCES, 1997); Linda Darling-Hammond, *Doing What Matters Most: Investing in Quality Teaching* (New York: National Commission on Teaching and America's Future, 1997).

[w] Darling-Hammond, *Teacher Quality and Student Achievement: A Review of State Policy Evidence*.

[x] K. Manno, "State of the States: North Carolina," in Education Week, *Quality Counts 2000: Who Should Teach?* (Bethesda, MD: Education Week, 2000), 142-143.

[y] American Federation of Teachers, AFL-CIO, Research Information and Services Department, *Survey and Analysis of Teacher Salary Trends 1999* (Washington, DC: AFT, 1999).

Data Sources and Notes for Quality Teachers and Administrators

EVERY TEACHER COMPETENT, CARING, AND QUALIFIED

Average teacher examination scores

Praxis Content Knowledge Examinations

Lori Ingwerson, Educational Testing Service. Praxis Professional Assessments for Beginning Teachers 1998-99. Email communication with David Holdzkom, 12 October 2000.

To obtain a teaching license in North Carolina, prospective teachers are also required to pass Educational Testing Service (ETS) Praxis subject matter examinations in their main teaching field to obtain a North Carolina license. The *First in America* reports provide the median score for teachers in North Carolina and the United States on a set of subject examinations in core academic areas. On average, 11 states require prospective teachers to pass each of the following examinations.

ETS is not allowed to release scores from other participating states; therefore the United States median is the only comparable score available.

TEST NAME	ETS TEST CODE	NC MEDIAN (# OF TEST TAKERS) 1998-99	US MEDIAN (# OF TEST TAKERS) 1998-99
Biology: Content Knowledge	0231	163 (129)	168 (1,291)
Chemistry: Content Knowledge	0241	160 (31)	149 (429)
Elementary Education: CIA	0011	179 (2578)	179 (19,029)
English – Language, Literature, and Composition: Content Knowledge	0041	176 (526)	176 (4,238)
General Science: Content Knowledge, Part 1	0431	167 (119)	167 (951)
General Science: Content Knowledge, Part 2	0432	158 (117)	158 (955)
Mathematics: Content Knowledge	0061	139 (311)	139 (2,785)
Middle School English	0049	177 (65)	171 (364)
Middle School Mathematics	0069	167 (45)	163 (304)
Middle School Science	0439	153.5 (12)	157 (190)
Social Studies: Content Knowledge	0081	168 (582)	167 (4,521)
Spanish: Content Knowledge	0191	170 (140)	176 (1,712)
MEDIANS and TOTALS		167 (4655)	167 (36,769)

Praxis Principles of Learning and Teaching Examinations

Educational Testing Service, Praxis Professional Assessments for Beginning Teachers. Results of the Principles of Learning and Teaching Examination Grades K-6, Grades 5-9, and Grades 7-12. Princeton, NJ: ETS, 1997-98.

Educational Testing Service, Praxis Professional Assessments for Beginning Teachers. Results of the Principles of Learning and Teaching Examination Grades K-6, Grades 5-9, and Grades 7-12. Princeton, NJ: ETS, 1998-99.

In addition to the Praxis subject matter examinations, prospective North Carolina teachers are required to pass the Educational Testing Service (ETS) Principles of Teaching and Learning (PLT) examination. Three PLT exams are offered for teachers seeking certification in Grades K-6, Grades 5-9, and Grades 7-12. Each of the PLT examinations contain 2-hours of multiple choice and constructed response questions designed to "assess a beginning teacher's knowledge of a variety of topics related to successful teaching." Test subjects may include educational psychology, human growth and development, classroom management, instructional design and delivery techniques, evaluation and assessment, and other professional preparation. Test takers receive one point for each correct multiple choice question and one to three points for each constructed response question.

Eleven states require prospective teachers to pass the PLT for Grades K-6 and 5-9. Thirteen states require prospective teachers to pass the PLT for Grades 7-12. Each state adopts its own passing score. To obtain a teaching license in North Carolina, all prospective teachers must receive a score of 160 or higher on the Principles of Learning and Teaching examination for the grade level in which they seek certification.

The *First in America* reports provide the median scores for teachers in North Carolina and the United States. ETS is not allowed to release scores from other participating states; therefore the United States median is the only comparable score available.

Percentage of teachers meeting licensure requirements

U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey. *Public School Teacher Surveys of the Schools and Staffing Survey.* Washington, DC: NCES, 1990-91.

U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey. *Public School Teacher Surveys of the Schools and Staffing Survey.* Washington, DC: NCES, 1993-94.

See data note on Safe, Orderly, and Caring Schools, EVERY SCHOOL FREE OF DRUGS, WEAPONS, AND DISRUPTION, Percentage of teachers reporting that threats and attacks have occurred in their schools.

The *Schools and Staffing Survey* percentages include the number of teachers with regular or advanced licenses and the number of beginning teachers with probationary licenses who have completed all requirements except a probationary period.

In North Carolina, prospective teachers must complete an approved education program for licensure. North Carolina also requires first-time applicants to obtain a minimum score on the Principles of Teaching and Learning (PLT) examination and other content-based PRAXIS Examinations in their main teaching field. Out-of-state applicants, to the extent that their education programs are equivalent to the standards and guidelines of North Carolina's approved education programs, qualify through reciprocity agreements. But they, too, must take the appropriate PRAXIS examinations to qualify for licensure.

Percentage of secondary teachers teaching in the field in which they are licensed

U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey. *Public School Teacher Surveys of the Schools and Staffing Survey.* Washington, DC: NCES, 1990-91.

U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey. *Public School Teacher Surveys of the Schools and Staffing Survey.* Washington, DC: NCES, 1993-94.

See data note on Safe, Orderly, and Caring Schools, EVERY SCHOOL FREE OF DRUGS, WEAPONS, AND DISRUPTION, Percentage of teachers reporting that threats and attacks have occurred in their schools.

Only secondary teachers whose main assignment was in mathematics, science, English, social studies, fine arts, foreign language, and special education were included in the analysis of whether a teacher had a degree in his/her main teaching assignment. Percentages include teachers completing an academic or education major, but do not include students with minors or second majors.

Percentage of teachers who report that they have participated in high quality professional development

Georgia State University Applied Research Center. *Statistical Report for the First in America Teachers' Survey.* Atlanta, GA: GSU, 2000.

See Technical Appendix B, First in America Survey Methodology for technical information.

The *First in America Teachers' Survey* asked teachers to what extent the professional development sponsored or supported by their school during the period from June 1999-May 2000 met the following criteria:

Planned according to school needs.
Aligned with high standards.
Useful for helping students to achieve high standards.
Ongoing, integrated professional development program.
Provided strategies to apply in the school.
Provided follow-up activities.
Provided networking activities.

The responses, not at all, to a small extent, to a moderate extent, or to a great extent, were supplied. The *First in America* reports cite the percentage of teachers who agreed to a moderate or great extent with five of seven of the statements. The percentage is derived from the total number of responses.

Number of teachers attaining National Board Certification

National Board for Professional Teaching Standards. "National Board Certified Teachers by State, North Carolina." San Antonio, TX: NBPTS, 1999. Available from http://www.nbpts.org/nbpts/about/state2.html#NORTH CAROLINA.

The National Board for Professional Teaching Standards is a nonprofit organization that operates a national, voluntary system to assess and certify teachers who meet these standards. Candidates for National Board Certification are asked to gather a portfolio of direct evidence of their work and to complete an analytical commentary on that evidence. In addition, all candidates complete a full-day of assessment exercises focused on content knowledge in their main teaching assignment. The entire assessment process takes place over the better part of a school year, during which most candidates say they spend about 120 hours on assessment activities. Each year, the National Board announces the number of newly certified teachers in each state.

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Percentage of teachers with master's degrees

U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey. *Public School Teacher Surveys of the Schools and Staffing Survey*. Washington, DC: NCES, 1990-91.

U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey. *Public School Teacher Surveys of the Schools and Staffing Survey*. Washington, DC: NCES, 1993-94.

See data note on Safe, Orderly, and Caring Schools, EVERY SCHOOL FREE OF DRUGS, WEAPONS, AND DISRUPTION, Percentage of teachers reporting that threats and attacks have occurred in their schools.

Percentage of teachers who remain in the teaching profession each year

Public Schools of North Carolina, Division of Human Resource Management, Licensure Section. *Teacher Turnover Report*. Raleigh, NC: NCDPI, 1998-99.

Public Schools of North Carolina, Division of Human Resource Management, Licensure Section. *Teacher Turnover Report*. Raleigh, NC: NCDPI, 1999-2000.

The North Carolina General Assembly requires the State Board of Education to monitor and compile an annual report on teachers who leave the profession. Each of the state's 117 school districts is asked to report the total number of teachers employed in the district, the total number of teachers leaving the district within the last school year, and the number of tenured teachers leaving the district. All 117 districts submitted surveys on the 1998-1999 and 1999-2000 school years. Surveys results are compiled by the Licensure Section of the North Carolina Department of Public Instruction.

EVERY PRINCIPAL A LEADER

Average principal examination scores

Educational Testing Service. *School Leaders Licensure Assessment*. Princeton, NJ: ETS, 1997-98.

Educational Testing Service. *School Leaders Licensure Assessment*. Princeton, NJ: ETS, 1998-99.

The *School Leaders Licensure Assessment* (SLLA), designed and administered by the Council of Chief State School Officers (CCSSO) and the Educational Testing Service (ETS), is used by some state licensing boards to measure whether beginning principals have the knowledge and skills to perform competently on the job. The SLLA consists of 25 constructed-response questions that ask test takers to evaluate situations, solve problems, and make decisions that often arise in schools.

The SLLA is currently required for certification as a principal in five states, including North Carolina. Each state sets its own passing score. To obtain a certification in North Carolina, all prospective principals must receive a score of 155 or higher on the SLLA.

Teacher and parent perceptions of their principal's leadership

Georgia State University Applied Research Center. Statistical *Report for the First in America Teachers' Survey*. Atlanta, GA: GSU, 2000.

Georgia State University Applied Research Center. *Statistical Report for the First in America Parents' Survey*. Atlanta, GA: GSU, 2000.

See Technical Appendix B, First in America Survey Methodology for technical information.

The *First in America Teachers' Survey* asked teachers whether they strongly agreed, agreed, neither agreed nor disagreed, disagreed, or strongly disagreed that their principal possessed each of the following characteristics:

The principal leads the development of the school's vision.
The principal uses the school's vision to guide day-to-day decisions.
The principal treats people fairly, equitably, and with dignity and respect.
The principal accurately identifies barriers to student learning.
The principal leads the development of programs to meet the needs of all students.
The principal promotes professional development that focuses on improving student learning.
The principal is visible and involved in the school and its activities.
The principal is accessible to teachers in this school.
The principal communicates well with a variety of audiences inside and outside of the school.
The principal solves problems and conflicts effectively.
The principal recruits and works to keep a high quality work force.
The principal uses resources (e.g. money, materials, and people) where they matter most.
The principal uses data to identify the strengths and weaknesses of the school's instructional programs.
The principal uses multiple sources of data (e.g. student absenteeism, dropout rates, and parental input) to measure school performance.

The *First in America* reports cite the percentage of teachers who strongly agreed or agreed with twelve of fourteen of the statements. The percentage is derived from the total number of responses.

The *First in America Parents' Survey* asked parents whether they strongly agreed, agreed, neither agreed nor disagreed, disagreed, or strongly disagreed that their child's principal possessed each of the following characteristics:

The principal treats people fairly, equitably, and with dignity and respect.
The principal is visible and involved in the school and its activities.
The principal communicates well with parents and others.
The principal solves problems and conflicts effectively.

The *First in America* reports cite the percentage of parents who strongly agreed or agreed with three of four of the statements. The percentage is derived from the total number of responses.

EVERY SCHOOL A GOOD PLACE TO WORK AND LEARN

Teacher and administrator perceptions of work environment

Georgia State University Applied Research Center. *Statistical Report for the First in America Teachers' Survey*. Atlanta, GA: GSU, 2000.

Georgia State University Applied Research Center. *Statistical Report for the First in America Principals' Survey*. Atlanta, GA: GSU, 2000.

The *First in America Teachers' and Principals' Surveys* asked teachers and principals whether they strongly agreed, agreed, neither agreed nor disagreed, disagreed, or strongly disagreed with the following statements regarding their working conditions:

Most of my colleagues share my beliefs and values about what the central mission of the school should be.
Paperwork does not interferes with my job of teaching.
There is a great deal of cooperative effort among the staff members.
In this school, staff members are recognized for a job well done.
I do not have to follow rules in this school that conflict with my best professional judgment.
I am satisfied with the size of my classes.
I have the autonomy to make classroom decisions that are in the best interests of my students and their learning.
In the past few years, I feel that my salary has improved substantially.
Compared to other professionals with similar education and work requirements, I feel that I am reasonably compensated.
I receive a great deal of support from parents for the work I do.

We also asked,

How satisfied are you with opportunities for professional development.
How satisfied are you with opportunities for professional advancement.

The *First in America* reports cite the percentage of teachers and the percentage of principals who strongly agreed or agreed or said that they were satisfied or very satisfied with eight of the twelve items. The percentage is derived from the total number of responses.

Percentage of annual education expenditure allocated to instruction

U.S. Department of Education, National Center for Education Statistics. *Revenues and Expenditures for Public Elementary and Secondary Education: School Year 1994-95*. Washington, DC: NCES, 1997.

U.S. Department of Education, National Center for Education Statistics. *Revenues and Expenditures for Public Elementary and Secondary Education: School Year 1996-97*. Washington, DC: NCES, 1998.

The *National Public Education Financial Survey* is an annual state-level collection of revenue and expenditure data for public education in grades pre-kindergarten through 12. It is a part of the *Common Core of Data* collection of surveys of state administrative records. Data are supplied by state education departments to the National Center for Education Statistics (NCES). NCES verifies the data and supplies any missing information.

Instructional expenditures are expenditures for any activities directly associated with the interaction between teachers and students. For example, teacher salaries and benefits, supplies, and purchased instructional services.

Average salaries of North Carolina's teachers

National Education Association, NEA Research. *NEA Estimates Working Database*. Washington, DC: NEA, October 18, 2000.

National Education Association, NEA Research. *Rankings and Estimates: Rankings of the States 1999 and Estimates of School Statistics 2000*. Washington, DC: NEA, 1999.

The National Education Association (NEA) gathers salary information from state education agencies for their annual report. The *First in America* reports present preliminary salary information for the 1999-2000 school year. The NEA did not provide the name of the first state in their 1999-2000 data.

Strong Family, Business, and Community Support

B-

In 1995, the National Education Goals Panel set a new goal. "By the year 2000, every school will promote partnerships that will increase parental involvement and participation in promoting the social, emotional, and academic growth of children." Two objectives associated with this goal are that every school will actively engage parents and that parents and families will help ensure that schools are adequately supported.[1] As the Goals Panel observed, "The extent to which students are ready to learn, are educated in a safe and drug free environment, achieve in math, science, and all school subjects, graduate from high school, and are prepared to contribute to society depends heavily on support from families and communities."[2] In the past, parents had to bear the responsibility of finding ways to become involved in schools and their child's education. But recently, schools, parents, and communities are beginning to share the responsibility more equally. Employers and the surrounding community can help shape the way schools and families play their roles, as well as support student learning directly.

The *First in America* measures of family involvement indicate that North Carolina parents' relationships with their schools are strong, and that parents across the state are actively involved in their children's learning. In fact, if we gave grades on priorities, the schools' and parents' performance in this area would rate an A- (91%). That is, schools and parents are about 91% of the way to the *First in America* targets for family involvement. Parents are particularly strong in supporting their children's learning at home, and schools are particularly strong in offering parents opportunities to volunteer in schools.

On community involvement, the picture is mixed. The state has already exceeded the *First in America* target for adults serving as mentors, but the state is well short of the target for employers offering opportunities for school involvement. If assigned a grade on priorities, the state would rate a C- (72%) for community involvement.

On child health indicators, which include measures of certain health habits along with access to health care, the state is doing reasonably well overall, earning a "grade" of B- (82%). In other words, the state is now performing on a level that is about 82% of the level set in *First in America* targets.

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STRONG FAMILY, BUSINESS, AND COMMUNITY SUPPORT

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK

Change: ⇧ North Carolina's score was significantly better. / ⇩ North Carolina's score was significantly worse. / ⇔ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY FAMILY INVOLVED IN THEIR CHILD'S LEARNING

• Nine of 10 NC teachers will engage in activities that promote parental involvement.	Percentage of teachers who actively promote parental involvement	OFFERING OPPORTUNITIES FOR PARENTS TO VOLUNTEER	LATEST NC SCORE: 90%
		COMMUNICATING WITH PARENTS	70%
• Nine of 10 parents will take steps to support their child's learning.	Percentage of parents who actively support their child's learning at school and at home	PARENTAL INVOLVEMENT IN THEIR CHILD'S SCHOOL	LATEST NC SCORE: 64%
		PARENTAL SUPPORT FOR THEIR CHILD'S LEARNING AT HOME	90%
• NC will be one of the nation's top 10 states in family support for homework.	Percentage of students who discuss their studies at home daily	% OF 4TH GRADERS REPORTING THEY DISCUSSED STUDIES AT HOME DAILY:	
		LATEST NC SCORE: 56% / PRIOR NC SCORE: 59% / CHANGE: ⇔ / NC RANK: Tied for 12th / US AVERAGE: 54% / TARGET SCORE: 57% / FIRST: 65%(DC)	
		% OF 8TH GRADERS REPORTING THEY DISCUSSED STUDIES AT HOME DAILY:	
		LATEST NC SCORE: 40% / PRIOR NC SCORE: 43% / CHANGE: ⇔ / NC RANK: Tied for 2nd / US AVERAGE: 34% / TARGET SCORE: 39% / FIRST: 46%(DC)	

LEGEND

*	*On this indicator a lower score is better, a higher score is worse.*
Latest NC Score:	*This is the average score for North Carolina taken from the most recent data collection available. Most recent data collection dates range from 1990 to 2000.*
Prior NC Score:	*This is the average score for North Carolina taken from the preceding data collection.*
Change:	*Change arrows show North Carolina's progress from the last data collection to the most recent data collection.*
⇧	*North Carolina's score is significantly better.*
⇩	*North Carolina's score is significantly worse.*
⇔	*Interpret North Carolina's score with caution — change is not significant.*
NC Rank:	*North Carolina's rank among states for which data are available. States are ranked from best to worst.*
U.S. Average:	*This is the average score for the United States taken from the most recent data collection available.*
Target Score:	*This is the score North Carolina currently needs to achieve to reach the First in America target.*
First:	*The score and state abbreviation is listed for the state receiving the best reported score.*

EVERY FAMILY INVOLVED IN THEIR CHILD'S LEARNING

Greater involvement of parents in their children's learning, both in school and at home, seems to help children learn.[3] Some researchers make very strong claims about parents' impact: "Three factors over which parents can exercise authority — student absenteeism, the variety of reading materials in the home, and excessive television watching — account for nearly 90% of the differences…in [student] achievement observed across states."[4]

Whether a parent's role is quite this powerful may be a matter of debate. But research has shown that students whose parents are involved in their learning earn higher grades and test scores, have better attendance, and are more likely to graduate from high school than students without family involvement in their education. Parents who are more involved in their children's school are generally more involved in activities that promote learning at home as well.[5] A growing body of research suggests that active efforts by schools to engage parents can raise levels of involvement for parents of all backgrounds.[6]

As indicated earlier, North Carolina is very strong in this priority area. Parents in North Carolina are very involved in their child's learning at home and are offered ample opportunities to volunteer in their child's school. In order to meet our *First in America* targets, we need to improve in two areas: teacher communication with parents, and parent involvement in schools.

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Nine of 10 NC teachers will engage in activities that promote parental involvement.

There is no comparative state-level data that tracks ways in which teachers engage in activities that promote parent involvement. There is some national-level information though, which provides context for the results of our North Carolina survey. Nationally, it appears that almost two-thirds of public school teachers report that, to a great or moderate extent, they provide information or advice to parents to help them create supportive learning environments at home.[7] Elementary school teachers are twice as likely as middle school teachers to provide information and advice, and four times as likely as high school teachers to provide information to parents to help them create supportive learning environments at home. In addition, just over one-third of all teachers report that they involve parents in classroom activities to a great or moderate extent. Elementary school teachers are more likely to involve parents in classroom activities to a great extent than are middle and high school teachers.[8] Teachers in self-contained classrooms, who are primarily elementary school teachers, reported the highest levels of involvement with parents.[9]

When schools work together with families to support learning, children tend to succeed not just in school, but throughout life. In fact, the most accurate predictor of a student's achievement in school is not income or social status, but the extent to which that student's family is able to

1. create a home environment that encourages learning,
2. express high (but not unrealistic) expectations for their children's achievement and future careers, and
3. become involved in their children's education at school and in the community.

Source: Henderson and Berla (1994), 1.

PERCENTAGE OF TEACHERS WHO ACTIVELY PROMOTE PARENTAL INVOLVEMENT

Offering Opportunities for Parents to Volunteer

Teachers and school administrators open the schoolhouse door to parents to become involved. According to the *First in America* survey of 900 teachers statewide, schools do offer opportunities for parents to participate. Nine out of ten teachers in our sample (90%) report that their school offers parents opportunities to get involved in their child's school through at least two of the following three activities: 1) volunteering in the classroom, 2) volunteering outside of the classroom, and 3) mentoring students (other than the parent's own child). The state has already met its target on this measure. In light of this unexpectedly strong performance, the Education Cabinet may wish to revise the target for future years.

Communicating with Parents

Because parental involvement is so critical to student learning, the *First in America* target is that nine of ten NC teachers will engage in activities that promote parental involvement. To determine what percentage of North Carolina's teachers are making an active effort to promote parental involvement, we surveyed over 900 teachers across all grade levels statewide. We did not simply ask teachers whether they try to get parents involved in their children's learning. Rather, we asked how frequently, if at all, teachers across all grade levels do the following: give parents written interim reports during grading periods, request that parents sign-off on homework, give parents written information about the school's overall performance on standardized tests, give parents positive phone calls or notes when their children's performance improves at school, and/or give parents examples of student work that meets high standards.

To be counted as making an active effort, a teacher had to report that he or she "sometimes," "always," or "frequently" communicates with parents in three of these five ways. By this measure, seven in ten North Carolina teachers (70%) report that they make significant efforts to promote parent involvement. This percentage represents teachers who regularly make several types of contact with parents.

Overall, 65% of the teachers surveyed reported that they always give parents written interim reports during grading periods, and 62% reported that they frequently or always give parents positive phone calls or notes when their children's performance improves at school. Fifty percent (50%) of the teachers surveyed frequently or always provide parents with examples of student work that meets high standards. Thirty-four percent (34%) request that parents sign-off on homework.

We are performing adequately in teacher communication with parents, but will have to improve steadily in order to make our 9-out-of-10 *First in America* target. To meet our target it is important that North Carolina's local districts, schools, and teachers continue to encourage and enlist strong parental involvement in their children's learning.

Nine of 10 parents will take steps to support their child's learning.

Parents can support their child's learning by participating in their child's school, but they can also support their child's learning through their involvement and interest in school work and enrichment activities at home.

PERCENTAGE OF PARENTS WHO ACTIVELY SUPPORT THEIR CHILD'S LEARNING AT SCHOOL AND AT HOME

Parental involvement in their child's school

The *First in America* target is that nine out of ten parents will take steps to support their child's learning through participation in school activities and through support for learning at home. Through a telephone survey of a representative statewide sample of over 500 parents, we asked parents how often they participate in four specific school activities. Parents were asked if they attended parent teacher organization or association meetings, volunteered in their child's classroom, volunteered in their child's school but outside their child's classroom, and/or mentored students other than their own. In order to meet our criteria for involvement, parents had to respond that they participated "occasionally," "monthly," or "weekly" in at least two of these four activities.

By this standard, over six in ten parents (64%) report that they are involved in their child's school. Most parents who serve as volunteers or mentors do so "occasionally." But over 10% volunteer weekly either in their own child's classroom (11%) or elsewhere in the school (12%). One in seven parents (15%) reported that they mentor students other than their own on a weekly basis. Over one-quarter of parents (27%) said that they attend parent-teacher organization or association meetings on a monthly basis, and more than half (52%) said they attend meetings occasionally. Performance on this indicator is not low, but the number of parents involved in their child's school must grow by 26 percentage points in order to meet the *First in America* target of nine in ten.

Parental support for their child's learning at home

In the same telephone survey, parents were asked whether they support their child's learning at home by ensuring that their child attended school, ensuring that reading material was available for their child, ensuring that homework assigned to their child was completed, and reading and/or discussing homework with their child. Nine out of ten parents (90%) reported that they support their child's learning at home through at least three of those four activities on a daily or weekly basis. This figure meets the target of nine out of ten parents supporting their children's learning at home.

On a daily basis, 85% of the parents surveyed said that they ensured that their child attended school and over three-quarters of parents (77%) ensured that homework assigned to their child was completed. On a daily basis, almost eight out of ten parents (78%) ensured that reading material was available for their child. Sixty-nine percent (69%) of parents read and/or discussed homework with their children on a daily basis and another 16% read and/or discussed homework with their children on a weekly basis, totaling 85% discussing homework either daily or weekly.

NC will be one of the nation's top 10 states in family support for homework.

Family support for homework is central to support for children's learning at home. The *First in America* target for family support for their children's homework is to be among the leading states in this regard. If data were available on all fifty states plus the District of Columbia, the target would be to place in the top ten. The best available data that permits comparison across states comes from a short questionnaire administered to 4th and 8th graders by the National Assessment of Educational Progress (NAEP). Approximately 40 states participate in the assessment where these questionnaires are administered. So our target is to be at least 8th among those forty — the nearest equivalent of being in the top 10 if data for all states were available.

PERCENTAGE OF STUDENTS WHO DISCUSS THEIR STUDIES AT HOME DAILY

More than half of North Carolina's fourth graders (56%) report discussing their studies at home daily. This is above the national average of 54% but just below the target score of 57%.

On the figures for eighth graders, North Carolina is tied for 2nd in the nation with three other states (Colorado, Maryland, and Utah). Forty percent (40%) of NC eighth graders reported that they discuss their studies at home daily.

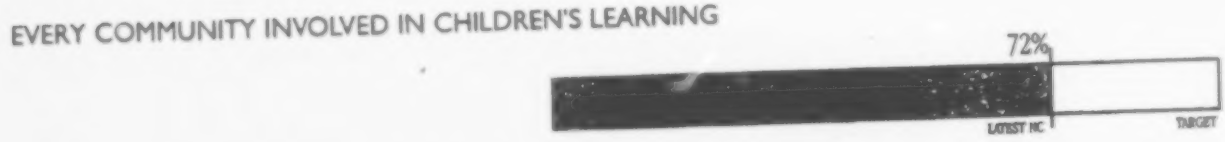
Only the District of Columbia had a higher rate (46%). Nationally, an average of 34% of eighth graders reported that they discussed their studies at home daily. In both fourth and eighth grade, the percentage of North Carolina students discussing their studies at home daily has remained stable since the previous data collection in 1994.

North Carolina is just below the current *First in America* target for fourth graders and just above the target for eighth graders. That is the good news. The bad news is that even in the top states, fewer than half of eighth graders and only a little over half of all fourth graders discuss their studies at home every day. There is considerable room for improvement here. As educators become more aware of just how powerful parents can be as allies in improving student achievement, these percentages can be expected to rise all across the country. To remain among the leaders, North Carolina will have to continue to progress in this area.

Related Information and Perspectives

Communication between parents and teachers is an important component of a parent's involvement in their child's learning. But given the limited amount of time during the day when teachers are free to speak with parents and the complexity of parents' schedules, it is often difficult for parents and teachers to find time to talk with each other. In recent years, schools have become more attuned to this challenge, and have responded by helping teachers become more accessible to parents. In our recent survey, 95% of North Carolina teachers report they are available by phone during the day, and 75% are available by phone in the evening.[10] Seventy-three percent (73%) of teachers are available to meet with parents in person at school during the evening. Forty-three percent (43%) are available to meet with parents at their workplace. Forty-seven percent (47%) of teachers said they were available to meet with parents in the parent's home. Only 42% of teachers report that they are available by email, an increasingly important channel for communication. Lack of availability by email may be due, in part, to the level of availability of technology in North Carolina schools.

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK
Changes: ⬆ North Carolina's score was significantly better. / ⬇ North Carolina's score was significantly worse. / ⬌ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.		
EVERY COMMUNITY INVOLVED IN CHILDREN'S LEARNING		
• Nine out of 10 parents will report that their employers offer opportunities for school involvement	Percentage of parents who report that their employer offers opportunities for school involvement	LATEST NC SCORE: 61%
• 40,000 mentors will be supporting children's learning in NC	Number of people serving as mentors	LATEST NC SCORE: 60,000+ / PRIOR NC SCORE: 21,500 / CHANGE: ⬆



Not only parents, but also communities and businesses can substantially improve a child's success in school. Almost half of all Americans (48%) believe that parents need the help of the local community in raising their children.[11] Communities can be involved in helping families raise their children in a variety of ways: by combating alcohol, drugs, and violence; by reinforcing successful child-raising skills; by providing mentor programs; by enlisting volunteers, including senior citizens; by offering summer learning programs; by linking social services; and by encouraging parent leadership.[12] Businesses, as members of the community, are particularly well positioned to take a leadership role in some of these activities. Statewide, North Carolina's business community is actively engaged in mentoring programs and many businesses have long provided courses for their employees that address family-work balance issues, including classes on successful parenting. During the *North Carolina Business Summit for*

Education 2000, summit participants identified "little [parent] involvement with their child's school" as one of the biggest barriers North Carolina would face in becoming *First in America* by 2010. Summit participants, who included many business and education leaders, recommended that to overcome this barrier, businesses and employees need to become more involved in mentoring and tutoring programs in schools.[14]

Businesses and community organizations can directly impact student learning through partnerships with specific schools by sponsoring educational trips, internships, and development opportunities for school staff. Businesses and communities can also directly support learning through donations of educational materials, technology, and professional expertise. Indirectly, businesses impact children's learning by recognizing their employees' family obligations. Parents who do not feel a conflict between their job as a parent and their job as an employee can be involved more in their child's school and learning at home. And children whose parents are more involved in their lives, particularly in their learning, perform better in school.

The state has made unexpectedly large gains in increasing the number of adults serving as mentors to children. However, North Carolina's performance on this priority is weak relative to other areas of the goal *Strong Family, Business, and Community Support*. To improve performance in this priority, it will be essential to raise employer support for employee involvement in schools.

Nine out of 10 parents will report that their employers offer opportunities for school involvement.

Research shows us that family-friendly business practices are good business. People who make their family a top priority are just as successful at work as those who do not, according to a study conducted by the Wharton School at the University of Pennsylvania. The study reports that, "a stable, mature and happy family life may allow one more time and energy to devote to the workplace than does a family life fraught with problems."[15] In addition, other research indicates that "when companies offer programs and services that make it easier for working parents to balance their family and work lives, employees may be more loyal and willing to go out of their way for the company. Turnover and hiring costs can be reduced and productivity increases."[15]

Business support for parents' involvement in their child's education, particularly when businesses allow parents time during the work day, can directly increase parent involvement in school. In a national research study, 86% of schools cite parent's lack of time as the biggest barrier to parent involvement.[16] Businesses can support parents' involvement in the lives of their children by encouraging them to be involved in their children's schools and by providing them with the support and flexibility that allows them to meet the needs of their family.

PERCENTAGE OF PARENTS WHO REPORT THAT THEIR EMPLOYER OFFERS OPPORTUNITIES FOR SCHOOL INVOLVEMENT

The *First in America* goal is for nine in ten parents (90%) to say that their employer offers, and they take advantage of, opportunities to get involved in their child's school. Through a telephone survey, we asked over 500 parents statewide if their employer offers any of the following family-friendly business practices: 1) paid maternity leave, 2) paid paternity leave, 3) paid educational leave, 4) family leave, 5) child care assistance, 6) flex-time, 7) fundraising efforts at the workplace for schools, and 8) time off for mentoring, tutoring, or volunteer work in schools. To be counted as reporting that their employer offers opportunities for school involvement, a parent had to say that their employer offers at least half (4) of the eight opportunities.

Four in ten (40%) parents reported that their employer offers at least four of the eight options. Among practices that provide flexibility for family needs, family leave (62%) and paid maternity leave (56%) were the most common family-friendly practices offered by employers. Some other practices were more common than might be expected: one-third of employees (33%) report that their employer offers paid paternity leave, and almost one-third (30%) report that their employer encourages involvement in their child's school by offering time off for mentoring, tutoring, or volunteer work in schools. Just over one-half of parents (53%) whose employers offer the opportunity to mentor, tutor, or volunteer in schools have used that opportunity in the last year.

According to these measures, North Carolina is not yet half way to the *First in America* target (90%) with a figure of 40%. To reach the target by 2010, both employers and parents will have to make major strides.

40,000 mentors will be supporting children's learning in NC.

Mentors can have a significant impact on the children they work with, particularly when the children being mentored have few opportunities to be in contact with adults who can help guide them as they grow up.[17] The North Carolina Mentoring Initiative is partnering with America's Promise, a national program, to recruit mentors for young people. Nationwide, America's Promise set a goal of recruiting two million mentors. North Carolina's "share" of the total is 40,000 mentors. So the *First in America* target is that 40,000 mentors will be supporting children's learning in the state.

NUMBER OF PEOPLE SERVING AS MENTORS

With the help of America's Promise, North Carolina has exceeded the *First in America* target for the number of mentors working with children. Over 40,000 mentors from businesses and community organizations are currently working with children in North Carolina. This figure is based on data collected through the North Carolina Mentoring Initiative and represents an 86% increase from the reported 21,500 mentors in 1999. This rapid increase in mentors is due to better tracking of mentors, more mentor volunteers, and increased funding for the Mentoring Initiative. By the Mentoring Initiative's definition, a mentor is someone who has provided one-on-one mentoring to a child at least one hour a week for a minimum of one year. For purposes of this report, coaches have not been counted as mentors although some would argue that coaches also serve as mentors (especially local community coaches who coach as volunteers).

The North Carolina Mentoring Initiative polls community organizations for their mentor numbers and has concentrated on organizations that track mentor relationships and keep data from year to year. Most of these organizations have indicated they are seeing a significant increase in their number of mentors over the last year, and in some cases, organizations have actually doubled their number of mentors. The state's new Community Service Leave Policy,[18] applicable to state employees, appears to be generating a lot of interest as it allows state employees the time off to volunteer as mentors.

Related Information and Perspectives

In a recent publication, the Boston-based Center for Work & Family noted that employers can boost employee involvement in educational activities by implementing programs and policies that facilitate flexible work arrangements.[19] The State of North Carolina has made just such a provision for all state employees. North Carolina's Community Service Leave Policy provides leave for a full-time state employee, with the approval of his or her supervisor, to volunteer for a community service organization 24 hours per year, or to mentor or tutor in a school for 1 hour per week for a maximum of 36 hours of leave.[20] North Carolina's policy was set, in part, to address the state's needs for volunteers to support schools and specifically notes that it can be used by parents for involvement in their child's school whether that be for a parent-teacher conference, participation in a non-athletic school event, or volunteering in a classroom.

TARGETS | INDICATORS | SCORES, CHANGE, AND RANK

Change: ↑ North Carolina's score was significantly better. / ↓ North Carolina's score was significantly worse. / ◆◆ Assigned North Carolina's score with another — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY CHILD WITH ACCESS TO QUALITY HEALTH CARE

- NC will be one of the top 10 states in child health and well-being.

94% (67,231 of 71,646) of eligible children without health insurance are currently enrolled in North Carolina's Children's Health Insurance Program.

Child health indicators

% OF INFANTS AT RISK FOR POOR HEALTH*

LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	FIRST
34%	39%	↑	Tied for 26th	35%	30%	24% (CT)

Access to health care

% OF 2-YEAR OLD CHILDREN WITH IMMUNIZATIONS

LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	FIRST
82%	84%	◆◆	Tied for 20th	80%	85%	91% (VT)

% OF CHILDREN WITH HEALTH INSURANCE

LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	FIRST
86%	87%	◆◆	26th	86%	91%	95% (MO)

Child health behaviors

% OF CHILDREN 12-17 HAVING 5 OR MORE ALCOHOLIC DRINKS IN A ROW DURING THE LAST MONTH*

LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	FIRST
9%	N/A	N/A	Tied for 7th	11%	9%	8%

% OF CHILDREN 12-17 USING MARIJUANA IN THE LAST MONTH*

LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	FIRST
7%	N/A	N/A	Tied for 10th	8%	7%	5% (WI)

% OF CHILDREN 12-17 WHO CURRENTLY USE CIGARETTES*

LATEST NC SCORE	PRIOR NC SCORE	CHANGE	NC RANK	US AVERAGE	TARGET SCORE	FIRST
19%	N/A	N/A	Tied for 41st	15%	14%	9% (CA)

Support for children's nutrition

	LATEST NC SCORE	PRIOR NC SCORE	CHANGE
FREE AND REDUCED MEAL PARTICIPATION	99%	99%	◆◆
SUMMER FOOD PROGRAM PARTICIPATION	9%	10%	↓

EVERY CHILD WITH ACCESS TO QUALITY HEALTH CARE

Children who are undernourished and unhealthy can neither develop normally nor learn to their full potential. Good nutrition and health care in the early years of a child's life are essential to readiness for learning.[21] Use of tobacco, alcohol, or marijuana can undermine health and disrupt learning particularly among adolescents. They may also indicate a more general indifference to risk[22] and low self-esteem.[23] While it is generally believed that children engaging in at-risk behaviors are "hard to reach," many of these children do participate in activities (sports, clubs, religious groups) that provide ways for adults to influence their behaviors and help them to develop positive lifestyles.[24]

North Carolina is performing moderately well in this priority area. The state is meeting the current *First in America* targets in minimizing binge drinking and drug use among children ages 12-17 and in providing free and reduced price meals to children during the school year. It is close to the targets in children's health insurance and in child immunizations. The state is weakest in cigarette use among 12-17 year-olds and in providing free and reduced meals to children when school is not in session. Without marked reductions in tobacco use and stronger promotion of summer food programs, North Carolina will have difficulty making the overall target for this *First in America* priority.

NC will be one of the top 10 states in child health and well-being.

The *First in America* target is for North Carolina to be one of the top ten states in child health and well-being. The following indicators of child health and well-being have nationally comparable data and were selected to provide a holistic measure of child health, well-being, and access to health care.

CHILD HEALTH INDICATORS

Children's health and well-being are a combination of many things: the access a child has to preventive measures such as immunizations and regular health care, and the lifestyle choices children make (or parents make for them) including healthy diet, regular exercise, and rejection of substance abuse. Health insurance helps assure

access to regular health care. Untreated illnesses can start out as minor problems (for example, an ear infection) but, left untreated, have long-term consequences (such as hearing loss).

Percent of infants at risk for poor health[a]

Any one of four "risk factors" may place a child "at risk for poor health:" 1) late (third trimester) or no prenatal care, 2) low maternal weight gain, 3) maternal smoking during pregnancy, and 4) maternal alcohol consumption during pregnancy.[a] Research has linked these four characteristics to children's later health, behavior, and academic achievement. While these risks are not an absolute predictor that a child will not perform well in school, experts are increasingly concerned about the number of children born with multiple risk factors and the cumulative effect of those risk factors on school performance.[a]

Currently 36% of infants in North Carolina are at risk for poor health. North Carolina has reduced the number of infants at risk for poor health since the last data collection in 1992 (from 38% of infants at risk), but the state still has more infants at risk of poor health than the nation on average (33%). The state is six percentage points from the current top ten states.

ACCESS TO HEALTH CARE

Communities can support children's health by providing safe and easy access to places where people can be active, by offering healthy foods in schools and other public establishments, and by creating smoke-free environments, particularly in areas with a high concentration of children.[a] NC Health Choice for Children — jointly funded by the state and federal governments — provides aid to communities in providing health care to children.

Percent of 2-year old children with immunizations

Immunizations are a good gauge of whether or not young children have had any formal medical care. Most immunizations are administered in a doctor's office and are accompanied by a regular check-up. According to the *1999 National Immunization Survey* published by the Centers for Disease Control and Prevention, 82% of two-year old children in North Carolina were fully immunized. In order to be counted as fully immunized, children had to receive four doses of the diphtheria-tetanus-pertussis vaccine, three doses of the polio vaccine, and one dose of either the measles or the measles-mumps-rubella vaccine by the time they were 35 months old. North Carolina is only three percentage points from the top ten states (85%) in immunizations and is above the national average of 80% of two-year-olds immunized.

Percent of children with health insurance

Health insurance is important for children because it increases their access to health care. Currently, 88% of North Carolina children have health insurance, above the national average (86%) but three percentage points below the current target (91%). This represents a slight increase (1%) over the previous year (87%).

Related Information and Perspectives

Through the Children's Health Insurance Program (CHIP), administered by NC Health Choice for Children, more than 67,000 children were added to the health insurance roles over the past year. The CHIP program provides coverage for children in working families who earn too little to pay for private health insurance, but too much to qualify for Medicaid. In 1999, North Carolina enrolled 94% of children who are eligible for CHIP. As a result, the Children's Defense Fund recently ranked the NC program the sixth best in the country, and the federal Health Care Financing Administration recognized the state's efforts to simplify the application process.[a]

The CHIP program covers everything from well-baby visits, to hospital care, to prescription drugs. In addition, CHIP provides coverage for vision, hearing, dental, and mental health screenings and treatment.[a]

Recent reports show that North Carolina was one of ten states that used its full 1998 allotment of funds from the federal government for CHIP. If current federal legislation remains unchanged, the state will have access to a surplus created by the other forty states that did not spend their allotment over the past three years.

CHILD HEALTH BEHAVIORS

Student risk-taking behaviors, such as tobacco, alcohol, and drug use, affect learning.[9] Risk-taking behaviors among young people not only contribute to declines in school performance, but also increase student health problems and risk of premature death.[10] Parents and community organizations, particularly clubs, team sports, and religious services and youth groups, can help reduce risk-taking behaviors.

Percent of children age 12-17 having 5 or more alcoholic drinks in a row during the last month*

Nine percent (9%) of North Carolina children age 12-17 report that they had 5 or more drinks of alcohol on at least one day (binge drinking) during the last month. This places the state 7th in the nation on binge drinking, an indicator of alcohol abuse.

The state is at the current target on this indicator. On average in the nation, 11% of 12-17 year olds report binge drinking in the last month, and states' binge drinking rates range from 8% (Virginia, Utah, Tennessee, Maryland, Florida, and District of Columbia) to 17% (North/South Dakota and Wyoming).

These figures are from the *1999 National Household Survey on Drug Abuse* released in September, 2000 by the U.S. Department of Health and Human Services. Because this is the first year that this report has reported state-level data, comparisons to previous North Carolina scores are not possible for this indicator or the next two indicators (marijuana use and cigarette use).

Percent of children age 12-17 using marijuana during the last month*

North Carolina children aged 12-17 are also among the lowest users of marijuana according to the *1999 National Household Survey on Drug Abuse*. Seven percent (7%) of children in North Carolina ages 12-17 report using marijuana at least once during the last month. So the state has reached its target on this indicator. Rates of marijuana use range from 5% (Wisconsin) to 15% (Delaware) with most states' usage rates concentrated between 6% and 10%. The US average for marijuana use among 12-17 year olds is 8%.[11]

Percent of children age 12-17 who currently use cigarettes*

Cigarette smoking among 12-17 year old children in North Carolina is very high. According to the *1999 National Household Survey on Drug Abuse*, almost one in every five NC children (19%) aged 12-17 years old smokes cigarettes. This rate of usage places North Carolina 41st in the nation, five percentage points worse than the target score (14%). States range from 9% (California) to 24% (Kentucky) with an average rate of use at 15% nationally.

SUPPORT FOR CHILDREN'S NUTRITION

Good nutrition is critical to the long-term health of children and their ability to succeed in school. Free and reduced meal participation is one gauge of support for child nutrition. Overall, North Carolina has good programs for providing students with basic nutritional needs during the school year. Unfortunately, for one quarter of the year when school is not in session, most eligible children in North Carolina do not have access to the same level of nutritional assistance. Community efforts in providing summer food programs are worthwhile and important in order to maintain children's overall health and to increase their school readiness in the fall.

The *First in America* target is to provide nutritious free and reduced meals to nine in ten children eligible for those meals. In 1999, North Carolina exceeded this target while school was in session, serving 99% of the children eligible for free and reduced priced meals at school during the school year. However, during the summer of 1999, only 9% were served meals through the Summer Food Service Program. That program is administered by the North Carolina Department of Health and Human Services and funded by the U.S. Department of Agriculture (USDA). The figures from 1999 do not represent an improvement over those in 1998. A great deal of progress needs to be made in supporting children's nutrition when school is not in session in order to meet the state's *First in America* target.

Related Information and Perspectives

According to the recently released *Year 2000 North Carolina Prevention Report*, two-thirds of premature death and disability in North Carolina are linked to three risky health behaviors: tobacco use, poor nutrition, and physical inactivity.[15] This report found that tobacco use among children in NC is rising, particularly among middle school-aged students. It also found that tobacco use might be more prevalent than reported in the *1999 National Household Survey on Drug Abuse*. According to the *Year 2000 North Carolina Prevention Report*, issued by the UNC School of Public Health in collaboration with state health experts and agencies, over one-third (38%) of 9-12th graders and almost one in five (18%) 7-8th graders use tobacco products. "Only 5% of local school systems are 100% smoke-free for all campus and school-related events, a clear deterrent for youth tobacco use."[16] This report also stressed the importance of good nutrition among North Carolina's children, noting that the number of overweight children in the state is four times higher than expectations based on nationwide numbers.

Poor nutrition is also a problem for children in low-income families. Supported at the federal and state level, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides food to low-income pregnant, postpartum, and breast-feeding women, infants, and children under the age of five. Infants and young children participating in WIC are more likely to receive regular preventive health services and score higher on some cognitive measures than children not participating in WIC. Currently, only about 75% of those eligible are currently enrolled.[17]

In an effort to address the year-round nutritional needs of school-age children, seventy-five counties in NC offer a summer food service program with widely ranging rates of child participation.[18] Summer food programs have a number of challenges to manage, each of which may decrease the percent of children the program serves. First, in order to qualify for funding, a community must serve meals at a site where 50% or more of the area households are at or below 185% of the Federal Poverty Guidelines. Centrally located community facilities such as schools and churches often meet this requirement. Communities also need to manage administrative tasks such as contacting and enrolling kids who qualify for the program, assuring that kids can get to the program site, and providing staff to prepare and serve meals. These administrative challenges, particularly those requiring navigation of government regulatory requirements, influence a counties' decision to provide a summer food program. Currently, 25 counties in North Carolina do not participate in the Summer Meal Program.[19]

Strong Family, Business, and Community Support: Summary of Performance

B-

Overall, North Carolina is performing reasonably well on the goal *Strong Family, Business, and Community Support*. With the exception of a few specific measures where the state is not making sufficient progress, North Carolina is close to achieving the current *First in America* targets in each of the priority areas.

In *Every Family Involved in Their Child's Learning*, North Carolina has achieved 91% of the target levels for the priority. With increased parent involvement in schools and increased teacher communication with parents, the state can reach the targets for this priority by 2010.

The state has made substantial progress and has exceeded its target in enlisting adults to mentor children as part of the priority, *Every Community Involved in Children's Learning*. If North Carolina's performance on this priority is to improve from the current score of 72%, the state's employers must increase their support for employee involvement in schools.

Currently, North Carolina has attained 82% of the target levels for *Every Child with Access to Quality Health Care*. Due to North Carolina's aggressive implementation of NC Health Choice for Children, the state has made notable strides in providing health insurance to children. However, continued progress is needed in critical areas. These include more successful summer food programs for children in low-income families, attention to decreasing health risks for infants, and reducing cigarette smoking among 12-to-17 year olds.

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[1] National Education Goals Panel, *Report of the Goal 8 Resource Group: Parental Participation* (Washington, DC: NEGP, 1995), 5.

[2] Ibid., 1.

[3] Anne T. Henderson and Nancy Berla, eds., *A New Generation of Evidence: The Family is Critical to Student Achievement* (Washington, DC: National Committee for Citizens in Education, 1994), 1.

[4] Jennifer Ballen and Oliver Moles, *Strong Families, Strong Schools: Building Community Partnerships for Learning* (Washington, DC: U.S. Department of Education, 1994), available from http://eric-web.tc.columbia.edu/families/strong/.

[5] U.S. Department of Education, National Center for Education Statistics, *Statistical Analysis Report: Fathers' Involvement in Their Children's Schools*, NCES 98-091 (Washington, DC: GPO, 1997), available from http://nces.ed.gov/pubs98/fathers/index.html.

[6] Henderson and Berla, 1.

[7] U.S. Department of Education, National Center for Education Statistics, *Status of Education Reform in Public Elementary and Secondary Schools: Teacher's Perspectives*, NCES 1999-045 (Washington, DC: GPO, 1999), 11.

[8] Ibid.

[9] Ibid., 13.

[10] Georgia State University Applied Research Center, *Statistical Report for the First in America Teachers' Survey* (Atlanta, GA: GSU, 2000).

[11] Massachusetts Mutual Life Insurance Company, *Mass Mutual Family Values Study* (Springfield, MA: Massachusetts Mutual Life Insurance Company, 1989), cited in Ballen and Moles.

[12] Ballen and Moles.

[13] North Carolina Business Committee for Education, *North Carolina Business Summit for Education 2000 Strategy Summary* (Cary, NC, June 27, 2000).

[14] "Gallup Poll Shows American Workers Overwhelmingly Loyal to Employers," *National Report on Work and Family* (Silver Spring, MD: Business Publishers, Inc., 1995), cited in Judi C. Casey and Patricia Ellen Burch, *A Catalyst for Educational Change: Promoting the Involvement of Working Parents in Their Children's Education* (Chestnut Hill, MA: The Center for Work and Family, Boston College, 1997), 14.

[15] S. J. Lambert, et al., *Added Benefits: The Link Between Family-Responsive Policies and Work Performance at Fel-Pro Incorporated* (Chicago, IL: University of Chicago, 1993), cited in Judi C. Casey and Patricia Ellen Burch, *A Catalyst for Educational Change: Promoting the Involvement of Working Parents in Their Children's Education* (Chestnut Hill, MA: The Center for Work and Family, Boston College, 1997), 14.

[16] U.S. Department of Education, National Center for Education Statistics, *Parent Involvement in Children's Education: Efforts by Public Elementary Schools*, NCES 98-032, by Nancy Carey, Laurie Lewis, and Elizabeth Farris (Washington, DC: NCES, 1998), 4.

[17] Ballen and Moles.

[18] Available at http://www.osp.state.nc.us/manuals/2000/comuserv.html.

[19] Judi C. Casey and Patricia Ellen Burch, *A Catalyst for Educational Change: Promoting the Involvement of Working Parents in Their Children's Education* (Chestnut Hill, MA: The Center for Work and Family, Boston College, 1997), 36.

[20] North Carolina Office of State Personnel, *Personnel Policies and Related Information* (Raleigh, NC: OSP, 2000), Section 5, 44-47.2, available from http://www.osp.state.nc.us/manuals/2000/comuserv.html.

[21] National Education Goals Panel, *Special Early Childhood Report* (Washington, DC: 1997).

[22] J.D. Hawkins, et al., "Delinquents and Drugs: What the Evidence Suggests About Prevention and Treatment Programming," in B.S. Brown and A.R. Mills, eds., *Youth at High Risk for Substance Abuse* (Rockville, MD: National Institute on Drug Abuse, 1987).

[23] S.P. Schinke, G.J. Botvin, and M.A. Orlandi, *Substance Abuse in Children and Adolescents: Evaluation and Intervention* (Newbury Park, CA: Sage Publications, 1991).

[24] Laura Duberstein Lindberg, et al., *Teen Risk-Taking: A Statistical Portrait* (Washington, DC: Urban Institute, 2000), 27; also available from www.urban.org/family/TeenRiskTaking.html.

[25] National Education Goals Panel, *Special Early Childhood Report*, 14.

[26] Ibid.

[27] NC Prevention Partners, *Does North Carolina Make the Grade for Prevention? 2000 North Carolina Prevention Report Card* (Chapel Hill, NC: UNC-Chapel Hill School of Public Health, 2000), available from http://www.ncpreventionpartners.org/reportcard2000.

[28] "Anniversary," *The Insider* (North Carolina State Government News Service, October 3, 2000), available from http://www.ncinsider.com/insider/2000/september/insd1003.html.

[29] North Carolina Department of Health and Human Services, North Carolina Division of Medical Assistance, *NC Health Choice for Children: Insuring Children, Ensuring Health, Building Better Lives*, available from http://www.dhhs.state.nc.us/docs/hchoice.htm.

[30] Lindberg, et al., 7.

[31] Ibid., 6.

[32] Using different methodologies and a different age group, the CDC *Youth Risk Behavior Surveillance* (YRBS) estimates the national average for marijuana use among students in grades 9-12 at 27% for 1999. This figure is substantially higher than the 8% average reported in the *National Household Survey on Drug Abuse* (NHSDA). This CDC report does not include data on marijuana use in North Carolina. The *First in America* reports include NHSDA data because it is more current, includes all 51 states, is drawn from a larger sample of NC residents, and is collected through a more confidential system (*see Data Sources and Notes for more information on the NHSDA, page 98 and on the YRBS, page 65*).

[33] NC Prevention Partners.

[34] Ibid.

[35] North Carolina Institute of Medicine, *Comprehensive Child Health Plan: 2000-2005, Task Force Report to the North Carolina Department of Health and Human Services* (Raleigh, NC: NC Institute of Medicine, 2000), 184; also available from http://www.nciom.org.

[36] North Carolina Department of Health and Human Services, Women's and Children's Health Section, Nutrition Services Branch, Special Nutrition Programs Unit, *1999 Summer Food Service Program, Percentage of Eligible Students Served* (Raleigh, NC: DHHS, November 1999).

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Data Sources and Notes for Strong Family, Business, and Community Support

EVERY FAMILY INVOLVED IN THEIR CHILD'S LEARNING

Percentage of teachers reporting that they make significant efforts to promote parental involvement

Offering opportunities for parents to volunteer

Georgia State University Applied Research Center. *Statistical Report for the First in America Teachers' Survey. Atlanta*, GA: GSU, 2000.

See Technical Appendix B, First in America Survey Methodology for technical information.

The *First in America Teachers' Survey* asked teachers whether they offered parents the following opportunities to volunteer in their child's school:

Volunteering in classroom.
Volunteering outside of the classroom.
Mentoring of students other than their own.

The *First in America* reports cite the percentage of teachers who report that they offer two of three of these opportunities. The percentage is derived from the total number of responses.

Communicating with parents

Georgia State University Applied Research Center. *Statistical Report for the First in America Teachers' Survey*. Atlanta, GA: GSU, 2000.

See Technical Appendix B, First in America Survey Methodology for technical information.

The *First in America Teachers' Survey* asked teachers whether they communicate with parents in the following ways:

I give parents written interim reports during grading periods.
I request that parents sign off on homework.
I give parents written information about the school's overall performance on standardized tests.
I give parents positive phone calls or notes when their children's performance improves at school.
I give parents examples of student work that meets high standards.

The *First in America* reports cite the percentage of teachers who sometimes, frequently, or always provide at least three of the five types of communication. The percentage is derived from the total number of responses.

Percentage of parents who report that they are involved in their child's school and provide support for their child's learning at home

Parental involvement in their child's school

Georgia State University Applied Research Center. *Statistical Report for the First in America Parents' Survey*. Atlanta, GA: GSU, 2000.

See Technical Appendix B, First in America Survey Methodology for technical information.

The *First in America Parents' Survey* asked parents how often during the last year they took advantage of the opportunities for school involvement listed below. Responses included: weekly, monthly, occasionally, not at all, or don't know.

Opportunities to attend parent teacher organization or association meetings.
Opportunities to volunteer in the classroom.
Opportunities to volunteer in the school but outside of the classroom.
Opportunities to mentor students other than their own.

The *First in America* reports cite the percentage of parents who responded that they occasionally, monthly, or weekly, took advantage of two of the four opportunities. The percentage is derived from the total number of responses.

Parental support for their child's learning at home

Georgia State University Applied Research Center. *Statistical Report for the First in America Parents' Survey*. Atlanta, [illegible], 2000.

See Technical Appendix B, First in America Survey Methodology for technical information.

The *First in America Parents' Survey* asked parents how often during the last year they provided the following types of support for their child's learning at home. Available responses included: daily, weekly, monthly, occasionally, or not at all during this year.

Ensured that your child attended school.
Ensured that reading material was available for your child.
Ensured that homework assigned to your child was completed.
Read and/or discussed homework with your child.

The *First in America* reports cite the percentage of parents who provided at least three of the four types of support to their child daily or weekly. The percentage is derived from the total number of responses.

Percentage of students who discuss their studies at home daily

U.S. Department of Education, National Center for Education Statistics, National Assessment of Education Progress. 1996 Mathematics Student Summary Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/-index.shtml.

U.S. Department of Education, National Center for Education Statistics, National Assessment of Education Progress. 1998 Reading Student Summary Data Tables. Tabulations from NC Education Research Council, 2000. Available from http://nces.ed.gov/nationsreportcard/TABLES/index.shtml.

See data note for High Student Performance, EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS, Percentage of students scoring proficient or higher on NAEP assessments, NAEP grade 4 and 8 reading.

On the student background questionnaire that accompanies the NAEP assessments, 4th and 8th grade students were asked how often they discuss their studies at home. Available responses included daily, one to two times per week, one to two times per month, or never. The *First in America* reports provide the percentage of students who responded that they discuss their studies at home daily. Data from 40 states were included in the 4th grade indicator and data from 37 states were included in the 8th grade indicator.

EVERY COMMUNITY INVOLVED IN CHILDREN'S LEARNING

Percentage of parents who report that their employer offers opportunities for school improvement

Georgia State University Applied Research Center. *Statistical Report for the First in America Parents' Survey*. Atlanta, GA: GSU, 2000.

See Technical Appendix B, First in America Survey Methodology for technical information.

The *First in America Parents' Survey* asked parents whether their employers have instituted a series of family-friendly business practices:

Paid educational leave.
Paid maternity leave.
Paid paternity leave.
Fundraising efforts for schools at your workplace.
Family leave.
Child care assistance.
Flex-time.
Time off for mentoring, tutoring, or volunteer work in schools.

The *First in America* reports cite the percentage of parents who responded affirmatively to four of the eight practices. The percentage is derived from the total number of responses.

Number of people serving as mentors

Stone, Faye. North Carolina Mentoring Initiative. Personal communication with Elizabeth Cunningham, December 1999.

Harrill, Linda. North Carolina Mentoring Initiative. Email communication with Elizabeth Cunningham, September 2000.

In January of 1999, Governor Jim Hunt announced the formation of a joint initiative of government, business, and community organizations to provide mentors for at-risk children. The North Carolina Mentoring Initiative surveys community organizations that track mentor relationships and reports the total number of active mentors in the state. The Mentoring Initiative defines a mentor as someone who provides one-on-one mentoring to children for at least one hour each week for a minimum of one year. For purposes of this report, coaches have not been counted as mentors.

EVERY CHILD WITH ACCCESS TO QUALITY HEALTH CARE

Child health indicators

Infants at risk for poor health

National Education Goals Panel. *National Education Goals Report. Building a Nation of Learners*. Washington: DC: NEGP, 1998.

The National Education Goals Panel (NEGP) identified "Infants at risk for poor health" by examining the percentage of children with at least one identified health risk. Health risks include, late (third trimester) or no prenatal care, low maternal weight gain (less than 21 pounds), maternal smoking during pregnancy, or maternal alcohol consumption during pregnancy.

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The NEGP computed the child health index for 47 states using birth records from 1992 and 1996 provided by the National Center for Health Statistics (NCHS). The NCHS notes that the percentages of infants at risk are based on the number of births used to calculate the health index, not the actual number of births. The percentage of complete and usable birth records used to calculate the health index varied from a high of 99.9% to a low of 75.3%. The National Center for Health Statistics also cautions that alcohol use during pregnancy is likely to be underreported by mothers on birth certificates.

Access to health care

Percentage of 2-year old children with immunizations

Centers for Disease Control and Prevention. "1998 National Immunization Survey." Available from http://www.cdc.gov/nip/coverage.

Centers for Disease Control and Prevention. "1999 National Immunization Survey." Available from http://www.cdc.gov/nip/coverage.

The *National Immunization Survey* (NIS) is conducted in two stages. In the first stage, NIS staff conducts a telephone survey of a random sample of households with children. This survey asks questions about childhood immunization for children 2 years of age and requests parental permission for contacting children's vaccination providers. Data are used primarily to monitor immunization coverage in the preschool population in 78 areas. In the second stage, the NIS staff completes a survey of vaccination providers. This survey of doctors and other providers is conducted for study participants who have provided consent. Data received are representative of the nation (the 50 states and the District of Columbia).

"Two-year-olds" are defined as children 19 to 35 months of age. "Fully immunized" children have received four doses of diphtheria-tetanus-pertussis vaccine, three doses of polio vaccine, and one dose of measles or measles/mumps/rubella vaccine.

Percentage of children with health insurance

U.S. Department of Commerce, Bureau of the Census. *Current Population Survey* (March Supplement). Washington, DC: GPO, 1999.

U.S. Department of Commerce, Bureau of the Census. *Current Population Survey* (March Supplement). Washington, DC: GPO, 2000.

This measure reflects children under 18 who were covered by any type of public or private health insurance during the previous calendar year. It includes children who were only covered for a portion of the year. The Bureau of the Census relies on state government agencies to report the percentage of children covered by private or government insurance in March of each year.

Children's Health Insurance Program (CHIP) data

North Carolina Department of Health and Human Services, Women's and Children's Health, Children and Youth Branch. "CHIP Enrollment." Raleigh, NC: DHHS, September 1999.

North Carolina Department of Health and Human Services, Women's and Children's Health, Children and Youth Branch. "CHIP Enrollment." Raleigh, NC: DHHS, September 2000.

The North Carolina Children's Health Insurance Program (CHIP), administered through NC Health Choice for Children, covers the children of working parents who earn up to 150 percent of the Federal Poverty Level. These children receive medical coverage at no cost. Children in families earning up to 200 percent of the Federal Poverty Level may receive coverage at reduced rates. Parents must submit a two-page enrollment application each year in order to access and renew CHIP coverage.

The North Carolina Department of Health and Human Services estimates that 71,646 children are currently eligible for CHIP benefits. The Department of Health and Human Services reports the number of children enrolled in CHIP each month.

Child health behaviors

Percentage of children age 12-17 having 5 or more alcoholic drinks in a row during the last month

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. *1999 National Household Survey on Drug Abuse*. Washington, DC: DHHS, 2000.

The *National Household Survey on Drug Abuse* (NHSDA), sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), collects data by administering questionnaires to representative state and national samples through face-to-face interviews at their place of residence. The survey covers residents of households, non-institutional group quarters (e.g., shelters, rooming houses, dormitories), and civilians living on military bases. Although the survey has been conducted on a national level since 1971, the 2000 report is the first to contain state-level data.

The 1999 NHSDA uses a combination of computer-assisted personal interviews conducted by a trained interviewer (CAPI) and a computer-assisted self-interview (ACASI). CAPI allows more efficient collection and processing of data and improved data quality. ACASI is designed to provide the respondent with a highly private and confidential means of responding to questions and should increase the level of honest reporting of illicit drug use and other sensitive behaviors.

The *First in America* reports cite the percentage of children who had five or more drinks on the same occasion at least once in the past month. The NHSDA defines this as "binge drinking."

Percentage of children age 12-17 using marijuana in the last month

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. *1999 National Household Survey on Drug Abuse*. Washington, DC: DHHS, 2000.

See data note for Strong Family, Business, and Community Support, EVERY CHILD WITH ACCESS TO QUALITY HEALTH CARE, Child health indicators, Percentage of children age 12-17 having 5 or more alcoholic drinks in a row during the last month.

Percentage of children age 12-17 who currently use cigarettes

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. *1999 National Household Survey on Drug Abuse*. Washington, DC: DHHS, 2000.

See data note for Strong Family, Business, and Community Support, EVERY CHILD WITH ACCESS TO QUALITY HEALTH CARE, Child health indicators, Percentage of children age 12-17 having 5 or more alcoholic drinks in a row during the last month.

Support for children's nutrition

Free and Reduced Meal Program participation

Public Schools of North Carolina, Financial and Personnel Services Division, Child Nutrition Section. "Free and Reduced Meal Program Enrollment." Raleigh, NC: NCDPI, 1998.

Public Schools of North Carolina, Financial and Personnel Services Division, Child Nutrition Section. "Free and Reduced Meal Program Enrollment." Raleigh, NC: NCDPI, 1999.

Any child enrolled in a North Carolina public school may purchase a meal through the National School Breakfast and Lunch Programs. Children from families with incomes at or below 130 percent of the poverty level are eligible for free meals. Those between 130 percent and 185 percent of the poverty level are eligible for reduced-price meals, for which students can be charged no more than 40 cents. In order to participate in the free and reduced meal program, students must submit an application signed by a parent or guardian. The percentage of eligible children enrolled in the Free and Reduced Meal Program is included in the *First in America* reports.

Summer Food Service Program participation

North Carolina Department of Health and Human Services, Women's and Children's Health Section, Nutrition Services Branch, Special Nutrition Programs Unit. "1998 Summer Food Service Program Percentage of Eligible Students Served." Raleigh, NC: DHHS, November 1998.

North Carolina Department of Health and Human Services, Women's and Children's Health Section, Nutrition Services Branch, Special Nutrition Programs Unit. "1999 Summer Food Service Program Percentage of Eligible Students Served." Raleigh, NC: DHHS, November 1999.

Seventy-five North Carolina counties participate in the United States Department of Agriculture (USDA) Summer Food Service Program. The program is designed to provide nutritional meals to children in low-income areas during the summer months when the Free and Reduced Meal Program is not operational. The USDA, through the NC Department of Health and Human Services, reimburses sponsoring agencies for all meals served to children less than 18 years. The percentage of eligible children enrolled in Summer Meal Program is included in the *First in America* reports.

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Financing North Carolina's Schools

The decade-long push to raise the achievement levels of primary and secondary school students in the United States has had a profound impact on the way education policy makers think about school finance. In the past, discussion focused primarily on the number of dollars allocated to education at the federal, state and district levels, and progress was measured in terms of specific "inputs" such as per pupil expenditures. Implicit in this way of thinking was the assumption that if sufficient funds were provided in a timely and rational fashion, successful teaching and learning would occur just as the dawn follows the night.

In the new climate of the 21st century, thinking about education has shifted from inputs to results. The standards-based reform movement has focused on the need to raise the achievement of all students to levels that were previously attained by only a select minority. Policy makers have begun to think long and hard about how this new educational task can be accomplished and how the various participants in the educational process — students, teachers, administrators and political leaders — can be held accountable for carrying out their particular responsibilities.

This shift in thinking was articulated in a recent report of the National Research Council entitled ***Making Money Matter: Financing America's Schools.***[1] In it a committee of experts in school finance and related areas wrote that school finance in the 21st century faces the daunting challenge of "how to harness the financing system to promote greater student achievement." The challenge is all the more significant, it continued, "because it aims to link finance directly to the purposes of education."

The new emphasis on outputs has important consequences for thinking about school finance. It means that policy makers must first look at the educational goals to be accomplished and then ask themselves: how can we design a finance system that will best serve these goals? Answering this newly-framed question requires new kinds of information and data. It is important in the new context to learn as much as possible about the practical effects of particular educational interventions. For example, will an investment in smaller class sizes in the early grades have a greater or lesser impact on student achievement than a proposed change in salary structures?

In short, North Carolina policy makers, like their counterparts in other states, are grappling with the complex issue of how to design a finance system to support an educational objective that is truly unprecedented. The authors of ***Making Money Matter*** put the challenge succinctly: "Never before has the nation set for itself the goal of educating all children to high standards."

Consistent with this new challenge, North Carolina in recent years has substantially increased investments in K-12 education. Progress has been particularly striking in the expansion of Smart Start and in efforts to raise teacher salaries, including bonuses for master's degrees and certification by the National Board for Professional Teaching Standards. Despite these gains, however, North Carolina still compares unfavorably with other states in support of education. We rank 36th in the U.S. in per pupil expenditure for K-12 education — even after adjustments for regional cost differences.[2] Nor is North Carolina making a particularly impressive effort to support its K-12 education system financially. We spend only 3 percent of our total taxable resources on education, which is a lower proportion than all but three states.[3]

Neither the Governor, the Education Cabinet nor the state's legislative leaders believe that the ambitious goals envisioned by the *First in America* program can be reached without additional investments. The preceding sections discuss some important aspects of financial inputs, including the key issue of the salary levels required for North Carolina to be able to recruit and keep good teachers and child care providers. However, given the new general emphasis on outcomes, the focus of our discussion will be on the sort of investments that are most likely to pay off in enhanced student achievement.

When it comes to such investments, North Carolina is in a strong position to make good decisions. The state already has in place a standards and accountability system that appears to be producing results. The National Education Goals Panel cited North Carolina and Texas as the states with positive gains on the greatest number of indicators as measured by the federally-sponsored National Assessment of Educational Progress (NAEP). The Department of Public Instruction reports that the proportion of students in grades [illegible] scoring at or above grade level rose from 53% in 1992 to 70% in 1999-2000 with the upward trend accelerating somewhat after the introduction of the ABCs program.

Given North Carolina's relatively low spending levels for education, it is surprising that the performance of the state's students is as good as it is. Indeed, a strong case can be made that the state's citizens and taxpayers are getting good value for the tax dollars they are already investing. Perhaps one reason is that 62% of the K-12 budget goes to instruction – a sizeable proportion that puts us in a tie for 17th in the country. At the same time, it is highly doubtful that North Carolina can ever be *First in America* in education while ranking 36th nationally in per pupil expenditure and 47th on one measure of tax effort.

Nationally, experts are sharply divided into four broad camps regarding the most promising over-arching strategies to pursue in making new investments in education. Members of the first camp begin by pointing out that some students, most notably those from low-income families, are more costly to educate than others. The key to improving overall student performance, these experts argue, is to make sure that the schools serving such students receive the full amount of resources that they need to serve these more costly-to-educate students. The question of what constitutes an adequate level of funding for such students is the central issue in the case of *Leandro v. State of North Carolina* that has recently been litigated in the state's court system.[4] The case has been brought by plaintiffs from low wealth rural districts and a group of urban-district intervenors who allege that current state funding levels do not take sufficient account of the characteristics of their students.

A second camp of finance experts stresses professional capacity building. To them, the most important objective must be to assure that every class is staffed by well-trained teachers and administrators and that they have the resources they need to operate at maximum efficiency. Such an approach favors investment in professional development and efforts to improve the teaching and learning environment, such as reducing class size.

The third group of experts argues that the key to improved student performance is incentives. Give students, teachers and administrators the right incentives, members of this camp argue, and the various actors in the education system will find ways of meeting the desired educational goals. North Carolina is already making considerable use of incentives through the ABCs of Public Education program. Incentives include financial bonuses for staff members in schools where students surpass performance expectations on standardized tests as well as requirements that students pass standardized examinations in order to be promoted at certain key grade levels.

The fourth camp believes that the most promising path lies through governance changes and the fostering of competition among schools. The charter school movement, which is strong in North Carolina, is a good example of this approach.

Underlying all discussion of school finance in the early 21st century are difficult issues of educational equity. In the past, when the emphasis of debate was on inputs, equity discussions tended to revolve around disparities of funding between high- and low-spending districts. In the new context of preoccupation with outcomes, debate tends to take place around the issue of whether particular spending policies are both adequate and strategically well-conceived to permit all students to achieve at the levels required to function in today's world.

In keeping with the shift of emphasis from inputs to outputs, decisions about new investments aimed at the goals of *First in America* can and must be guided by solid information about what investments are likely to produce the best results. Over the next ten years, the performance data provided in this *Progress Report* can provide such guidance. These data should help policy makers and the public understand where investments are paying off and where we are lagging. In areas where North Carolina is lagging, we will then have the information necessary to determine whether the problem is rooted in a lack of adequate resources or a lack of effective strategies.

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Making North Carolina Schools First in America: Contributions of the Public Schools of North Carolina

The Public Schools of North Carolina (State Board of Education and Department of Public Instruction) have five priorities that drive policy-making and activities.

- *High Student Performance*
- *Safe, Orderly, and Caring Schools*
- *Quality Teachers, Administrators, and Staff*
- *Strong Family, Community, and Business Support*
- *Effective and Efficient Operations*

HIGH STUDENT PERFORMANCE

Student achievement is the cornerstone of State Board of Education's activity and the focus of the Department of Public Instruction. Since 1995, North Carolina has taken rigorous steps to raise expectations for all students. The ABCs of Public Education provided the state's first school-by-school report of student performance, first for K-8 schools in 1996-97 and then for high schools in 1997-98. The 2000-01 school year represents the fifth year of the ABCs for elementary and middle schools and the fourth year for high schools.

Since the beginning of the ABCs, the number of schools with 80 percent or more of their students at or above grade level has grown from only 158 schools, or 9.7% of schools, to 510 or 24.1 percent. The number of schools with 90% or more of their students at grade level has increased from only 12 schools in 1996-97 to 73 schools in 1999-2000.

A total of 69.8% of students in grades three through eight scored at or above grade level for the 1999-2000 school year, a gain of nearly 10 percentage points since the ABCs began.

During the 2000-01 school year, accountability in North Carolina public schools is moving to a new level — to the individual student.

The new Student Accountability Standards with gateways at grades three, five, eight and at high school graduation require students to demonstrate that their performance is at grade level before they are promoted. Students will demonstrate their proficiency through end-of-grade tests and by passing the new High School Exit Exam. In addition, they still will be required to pass the NC Computer Skills Test and to meet local requirements for promotion or graduation.

This represents the first time that North Carolina has implemented statewide promotion standards in the elementary and middle grades. Fifth graders are the first students affected this year. Third and eighth graders will be affected for the first time in 2001-02. High school students beginning with the Class of 2003 will be required to meet the new standards, including passing the High School Exit Exam. The new Exit Exam will be given for the first time in the spring of 2002 to 11th graders.

The Student Accountability Standards are designed not only to ensure that students are promoted only when they are ready to work at the next grade level, but also to ensure that students receive intervention as soon as they experience difficulty with schoolwork. Many school districts have already implemented focused intervention strategies to help students who are below grade level.

The new policy has other safeguards including re-tests and a review process that can be initiated by the student's parents or teachers. Consistent with state law, promotion decisions remain with the student's principal.

SAFE, ORDERLY, AND CARING SCHOOLS

North Carolina public schools are among the safest places for children, teenagers and their families. The *Sixth Annual Statewide Report on School Violence* showed that school violence figures remained steady between 1997-98 and 1998-99. While the number of all reported violent acts rose by a statistically insignificant four cases, the total occurrences of all acts per 1,000 students decreased slightly from 6.343 to 6.243.

As in every previous reporting year, three acts made up the majority of all acts reported. Possession of weapons (not firearms), possession of a controlled substance and assault on school personnel account for 86% of all reported misbehaviors. In addition, 77% of the schools continue to report five or fewer incidents each year.

Citizens recognize the safety of most schools. The *2000 Spring Carolina Poll* conducted by the UNC-Chapel Hill Center for Research in Journalism and Mass Communication showed that nearly two thirds (65%) of North Carolinians say that school violence is not very serious or is not a problem. Over the past few years, poll results have shown that citizens are feeling more confident in the safety of their public schools.

The Department of Public Instruction offers Safe Schools Teams to provide free-of-charge safe school audits and other services to prevent or respond to school violence. More than 100 schools or school districts have taken advantage of these services to improve their schools' environments and reduce the likelihood of violence.

In May, 13 public schools were recognized for their efforts to promote safety and were named Super Safe Schools.

QUALITY TEACHERS AND ADMINISTRATORS

Recruiting and retaining quality teachers and administrators is a critical need during a time of increasing student and school standards. Several efforts are underway to help make entry into the education profession more rigorous and to better reward educators for their skills.

When the final phase of the *Excellent Schools Act* was approved in 2000, more than $222.7 million was appropriated to fund the final installment of North Carolina's efforts to bring teacher salaries to the national average. Also, longevity payments for teachers were brought to the same level as other state employees' at a cost of $12.5 million. Both of these actions are designed to help North Carolina recruit and retain quality teachers.

Principals, also, received an average raise of 10.5%, which includes a 1% incentive for meeting 1999-2000 safe schools objectives and a 1% incentive for meeting or exceeding the 1999-2000 ABCs objectives.

All school-based certified staff are eligible for ABCs bonus awards if they work in a school that makes expected or exemplary growth/gain.

In addition to the efforts to improve salaries, the *Excellent Schools Act* has strengthened mentoring programs for beginning teachers, improved the master's degree programs for teachers, provided 12% bonuses for teachers earning National Board Certification, and made licensure requirements more rigorous.

North Carolina accounts for more than a quarter of the nation's National Board Certified teachers — 1,262. The next closest state is Ohio with 593.

STRONG FAMILY, COMMUNITY, AND BUSINESS SUPPORT

Strong family, business, and community support is the newest priority of the State Board of Education, developed in recognition of the need for public school partners to support student achievement.

The State Board of Education and Department of Public Instruction have been building public involvement in schools through a variety of advisory groups, including business, parent, and student groups.

Three goals in this area have been set: having education priorities that are responsive to the needs of family, community, and business consumers; establishing a comprehensive and aligned system of support for academic success and well-being of all children that includes meaningful involvement in schools and interagency collaboration when appropriate; and developing a system to build the capacity of local districts to create, respond to, and sustain meaningful partnerships.

In recognition of the importance of this priority, the State Board's 2001-03 biennial budget request outlines needs of several million dollars to support initiatives at the state and local levels. These initiatives include training of school staffs and parents, seed grants to support local partnership efforts, and communication efforts to ensure that there is dialog between schools, parents and communities.

North Carolina is fortunate to have active business organizations that are very supportive of public schools. The North Carolina Business Committee for Education, The Education: Everybody's Business Coalition, and the North Carolina Citizens for Business and Industry are among the strongest supporters of partnerships.

A new awards program to recognize business partnerships is being developed. Also, a conference to focus on best practices regarding this priority is planned for Fall 2001.

EFFECTIVE AND EFFICIENT OPERATIONS

The Department of Public Instruction and State Board of Education believe in continuous improvement to set and meet their goals for schools and students. In 1999, the Department and the Board were honored by the North Carolina Quality Leadership Foundation as one of 15 organizations selected for recognition for achievement of nationally recognized standards of performance excellence.

This recognition followed internal self-assessment and intensive evaluation by qualified examiners.

COMMUNICATION IS A KEY

A key part of all of these priorities is continuous improvement and constant communication with stakeholders and customers. The Department has established various communication vehicles to keep in touch with those interested in schools. The primary way is through free subscription e-mail lists. To subscribe to one of these lists, visit the Department of Public Instruction web site, www.ncpublicschools.org and click on *Stay Informed*.

Making North Carolina Schools First in America: Contributions of The North Carolina Community College System

NORTH CAROLINA
COMMUNITY COLLEGE SYSTEM

The North Carolina Community College System consists of 59 institutions enrolling between 750,000 and 800,000 adults each year. The System's mission is to open the doors of opportunity by providing education and training for the workforce, support for economic development, and services to communities and individuals, which improve the quality of life in North Carolina.

The System is fully supportive of all the goals of *First in America*. Those most directly related to the mission of community colleges are as follows:

EVERY CHILD READY TO LEARN

Every child with access to quality child care

Community colleges provide by far most of the training required for credentials for childcare operators and workers. During this past year, the North Carolina Community College System has fulfilled its commitment to expand early childhood training programs to all 59 comprehensive community colleges. All of the colleges are approved to offer Early Childhood Associate Degrees, the basic credential for qualified caregivers. Also, 14 colleges are approved to offer the Teacher Associate Degree, and two community colleges are approved to offer the Associate Degree in Special Education.

Twenty-nine community colleges operate on-campus childcare facilities to assist in training and to provide quality care for employees, students and the community. The higher education bond proposal includes funds that other campuses may use to build centers.

Every parent a good first teacher

Research continues to demonstrate that the educational level of parents, particularly of mothers, is a critical factor in predicting school success for children. Community colleges are North Carolina's first and most important step for adults who want to learn. Community colleges are the state's primary source of literacy, English as a second language, adult high school and GED programs. The North Carolina Community College System is working to increase funding for comprehensive family literacy programs, which teach parents as their children go to school. The System has started implementing the Even Start Family Literacy Collaboration grant, which includes a statewide Family Literacy Coordinator and task forces focused on evaluation, professional development and resource improvements.

In May 2000, the System contracted with Intelecom, a private-non-profit company, to help develop an English as a Second Language family literacy video and print series to be sent to all community college and community-based literacy organizations funded through the System. In August, the System approved a continuing contract with MOTHEREAD, a nationally known non-profit organization based in North Carolina, to provide quality training for family literacy personnel.

SAFE, ORDERLY, AND CARING SCHOOLS

Every school free of drugs, weapons, and disruption

Community colleges train most law enforcement, fire, rescue and public safety workers statewide. In the spring of 2000, the System Office called together experts from the law enforcement community and from the community colleges to develop specific training for both the degree programs and continuing education in school violence issues. Already, by May, special topics for immediate use were in place, and requests for endorsements were submitted to the training and standards Commissions of the North Carolina Department of Justice and the North Carolina Sheriffs' Association.

System Office staff, working with regional coordinators and law enforcement agencies, have developed and offered extensive workshops around the state in school violence issues for law enforcement and educational personnel.

QUALITY TEACHERS AND ADMINISTRATORS

Every teacher competent, caring, and qualified

North Carolina needs more sources for certified teachers, particularly in rural and isolated areas. Community colleges are often the only post-secondary institutions in areas that must need teachers and are thus uniquely positioned to increase the number of qualified "home-grown" teachers, committed to the communities in which they live and work and to the future of our young people.

Community colleges are working on several efforts to increase the number of students who begin their college studies in education in college-transfer programs at community colleges. An important first step was the approval of the comprehensive articulation agreement to smooth transfer between community colleges and the campuses of the University of North Carolina. Many independent colleges and universities have signed similar agreements as well.

The next step, already accomplished, was the establishment of college-transfer programs at every community college. Community colleges and the schools of education at the universities have developed detailed pre-major agreements in a number of education fields, so students who know they want to teach are well prepared in community colleges.

H. Martin Lancaster, President of the North Carolina Community College System, has placed a high priority on new efforts in community colleges to provide opportunities for people already living and working in communities needing teachers to complete their credentials without leaving homes, jobs and families. One outstanding example now in place is the Appalachian Learning Alliance, a partnership between Appalachian State University and nine regional community colleges in western North Carolina. The Alliance is specifically designed to meet identified baccalaureate and graduate degree needs by providing degree completion programs on the community college campuses. Community colleges in the southeast have similar relationships with UNC-Wilmington, and more such partnerships are planned.

President Lancaster is also raising funds through the North Carolina Community Colleges Foundation to expand funding for scholarships for people already employed as child care workers, teacher aides and other school support workers to obtain credentials for teaching certification at their community colleges.

Teachers already in the classroom are taking advantage of the expertise of community colleges in computer training. Through partnerships with Learn NC and a major federal grant administered by the University of North Carolina, community colleges across the state are providing hands-on training in computer, media and other technology now required for classroom teachers.

STRONG FAMILY, BUSINESS, AND COMMUNITY SUPPORT

Community colleges support a healthy economy, which provides jobs for a thriving community. Further, community colleges have a unique role in bringing together employers, educators and students.

In partnership with JobReady and other efforts in elementary and secondary schools, community colleges sponsor summer programs to introduce students to careers and to community college campuses. A number of community colleges also bring teachers accustomed to academic environments into labs and workshops to help them connect classroom lessons into the workforce.

At the System Office, specialists in economic development and in small business assistance are developing training programs to encourage employers to promote school involvement through their regular business practices.

Making North Carolina's Schools First in America: Contributions of The University of North Carolina

HIGH STUDENT PERFORMANCE: THE UNC MINIMUM COURSE REQUIREMENTS

Students who take a rigorous selection of courses in high school including at least two years of a second language and advanced mathematics do better in college. They get better grades, stay in college, and get their degrees sooner than students who do not take a strong academic course selection in high schools.

North Carolinians have a national reputation for improving the educational opportunities and outcomes for students. We have already raised standards for schools, teachers, school children, and teacher education. National and state-normed test scores are rising, more minority students are achieving higher educational progress, and very young children are being better prepared for school. The University of North Carolina (UNC) is now building on this strong foundation to increase the minimum course requirements expected for entry to the University.

In 1999, Governor James B. Hunt, Jr. set the state on an ambitious goal by challenging the citizens to have North Carolina become *First in America* in education by 2010. The governor challenged all sectors of education to establish a set of goals and an action plan that would contribute to the overall *First in America* goal. The University of North Carolina has identified a 10-step plan to contribute to the governor's challenge.

The University's first and primary contribution to meeting this goal will be in encouraging and supporting more students and a greater diversity of students to continue on into higher education after graduation from high school (*See proposed contributions of the University of North Carolina's to First in America page 107*). Toward that end the University Board of Governors has approved new high school minimum course requirements for students to be eligible for admission to any UNC institution. This strategy, to improve student performance by raising University minimum course admission standards in mathematics and second languages, was carefully considered by the University administration and Board of Governors and was based on analysis of an extensive database of student performance in the University.

The Office of the President at the University of North Carolina is establishing a K-16 Minimum Course Requirements (MCR) Implementation Team that includes representatives from the State Board of Education, the Department of Public Instruction, the State Board of Community Colleges, the N.C. Community Colleges President's Office, the Office of the Governor, the NC PTA, campus representatives, and others. The mission of this team would be to develop a MCR Implementation Plan that makes recommendations and suggests timelines to the different agencies, policy groups, and community groups. The goal of the MCR Implementation Team will be to identify the ways and means to assure that all students in North Carolina have the opportunity to take and successfully complete the courses necessary to access the University of North Carolina and to track the Implementation Plan.

The changes in minimum course requirements do not take effect until fall of 2004 (language) and fall of 2006 (mathematics) to allow adequate time for a comprehensive implementation plan. Currently 95.3% of students enrolled in the 16 campuses of the University in the fall semester, 1998 met the 2004 second language requirement, 81.1% met the 2006 mathematics requirement, and 78.7% met both requirements. The recommendation for increased course requirements was developed based on evidence that an increase in requirements leads to an increased college success for all students, but especially for African-American students. Since the University increased requirements ten years ago, black enrollment in the University increased by 147.3%, compared to 118.7% in white student enrollment increases.

How do we know it will work? There is evidence — a luxury we often have to forego in the arena of public policy. The University of North Carolina General Administration has examined the effect of raising high school course requirements for admission to the University. The data reveal the strong contribution that a broad and challenging high school curriculum that includes foreign language makes to students' academic success in college. For example, 76% of students who entered a UNC institution having completed two years of the same foreign language returned for their sophomore year, whereas only 67% of those who had taken up to one year of foreign language returned for their sophomore year. Similarly, the group with two years of foreign language achieved a first-year grade point average of 1.96, compared to 1.71 for students with less foreign language coursework. And students who completed both two years of foreign language and four years of mathematics earned a grade point average of 2.28 their freshman year and 82% of them returned for their sophomore year.

PROPOSED CONTRIBUTIONS OF THE UNIVERSITY OF NORTH CAROLINA TO *FIRST IN AMERICA*

OVERVIEW

As their contribution toward the Governor's goal of making North Carolina First in America in education by 2010, the constituent institutions of The University of North Carolina and The Center for School Leadership Development (Principal Fellows Program, Principals' Executive Program, NC Teacher Academy, Mathematics and Science Education Network, NC Model Teacher Education Consortium, NC Center for the Advancement of Teaching, NC TEACH, Executive Leadership Academy), the NC School of Science and Mathematics, and UNC-TV are exploring the following ten strategies:

1 **Improve student performance by raising University admission standards in mathematics and foreign language.**
Require and support students to achieve higher levels of knowledge and skill in order to gain entrance to the University, and explore the creation of a new assessment system to assure that they do know and can do what they must to prosper in the University.

2 **Enable more students to meet the new standards by providing professional development for teachers and administrators and technology-based learning tools for students.**
Provide professional development to help educators learn how to use technology effectively for teaching and learning.

3 **Help eliminate early school failure by providing research-based professional development and assistance.**
Collaborate with community colleges to provide research-based professional development to strengthen early childhood and pre-school programs. Help schools implement proven, research-based models to prevent early school failure and contribute to closing the minority achievement gap.

4 **Enable 10% of the NC teaching force to achieve National Board certification by expanding University-based programs of support for Board candidates.**
Collaborate with teachers already certified by the National Board for Professional Teaching Standards to help new candidates prepare for Board assessment. Raise minority candidates' participation rate and raise their success rate to equal that of other candidates.

5 **Improve teacher education by recruiting Board-certified teachers as part of the clinical faculty for schools of education.**
Board certified teachers can both demonstrate accomplished practice and explain why they do what they do. Make an internship with a Board-certified teacher part of every new teacher's preparation.

6 **Double the percentage of NC teachers with master's degrees by recruiting more teachers into redesigned programs.**
Implement the redesign of master's programs for experienced teachers and recruit enough teachers into the new programs to increase from the percentage of North Carolina teachers with master's degrees to more than 50%.

7 **Improve recruitment, induction, and retention of new teachers and administrators.**
Develop new models for teacher and administrator preparation programs, mentor support, and career-long professional development. Models should focus particularly on a more diversified teaching force.

8 **Prepare and support school-based administrators who can lead 21st century schools.**
Continue to increase the rigor and depth of preparation of administrators to assure quality leadership for the public schools of North Carolina.

9 **Support better use of existing funds by training local educators in resource reallocation.**
Recent research shows how existing funds can be used far more effectively at the school level. Help principals, superintendents, and local board members learn how to use these research-based approaches.

10 **Help policy makers and educators work smarter by creating a *multi-university center for policy-related research.***
Build a stronger capacity to support education reform with sound research and link it with policy through the NC Education Research Council.

Making North Carolina Schools First in America: Contributions of The North Carolina Independent Colleges and Universities

North Carolina
INDEPENDENT
Colleges & Universities

North Carolina's 36 independent colleges and universities are committed to helping North Carolina public schools become *First in America* by the year 2010. To assist in reaching this ambitious goal, North Carolina Independent Colleges and Universities (NCICU) appointed a committee of six college and university presidents to examine the five major goals and to develop strategies that the colleges might consider implementing for each goal. The committee is composed of Dr. James B. Hemby, Jr., president of Barton College; Dr. Leo M. Lambert, president of Elon College; Dr. Donald W. McNemar, president of Guilford College; Dr. Julianne Still Thrift, president of Salem College; Robert F. Vagt, president of Davidson College; and Dr. Dorothy C. Yancy, president of Johnson C. Smith University. Dr. A. Hope Williams, president of NCICU, chairs the committee.

The Presidents' committee met via conference call in early March 2000 to discuss possible strategies individual institutions might explore to meet each of the five goals. The committee noted that there are some goals into which independent colleges and universities could have little input, and other areas where the colleges could make a great difference. It was suggested that faculty, staff, students, trustees, parents, alumni, and other constituencies of the institutions could play a part in reaching the goals. The committee suggested the NCICU staff develop proposed strategies under each goal and submit the suggestions to the committee for evaluation. The staff is in the process of developing proposed strategies to be discussed by the committee. Presidents of all 36 independent colleges and universities in the state met on March 6, 2000, to study the recommended strategies and determine which courses of action are appropriate for their individual institutions.

It was noted that the staff should draw heavily from the *North Carolina Independent Colleges & Universities In Partnership with North Carolina Public Schools* publication which describes partnerships currently in effect that could be duplicated at campuses across the state. Examples of these partnerships include students who serve as tutors and mentors in the public schools for at-risk students, faculty who hold programs on college campuses to help disadvantaged students, various technology training initiatives for in-service teachers, workshops, seminars, and programs in the public schools.

Because of the importance of teacher education programs to the *First in America* effort, NCICU asked the deans of the Teacher Education Programs at the 36 institutions to discuss ways the delivery of teacher education could be improved in North Carolina. The deans met on March 3, 2000 and discussed several aspects of teacher education in the state and shared concerns, ideas and suggestions. The deans are meeting bi-monthly to continue these and related discussions.

Several changes that will reflect on teacher and student quality have been implemented at independent colleges and universities. Every institution with a master's degree program has adopted new state standards and redesigned the curriculum to meet those standards. The first statewide Institutions of Higher Education Performance Report has been completed, with independent college and universities holding top performance ratings. Deans of education participated in the redesign of the approval process to ensure alignment with State Board of Education priorities and greater focus on performance measures. Elementary education programs have been revised as they relate to preparation to teach reading and communication skills. Partnerships with the public schools have been expanded. Both individually and through NC TEACH, independent colleges and universities are expanding opportunities for lateral entry candidates into the teaching profession.

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Appendix A: Computation of the First in America Grades

The strategy for computing grades for each goal relied upon the targets that were set for each of the individual indicators of performance. The *First in America* reports have five goals. Each goal has either three or four priorities. Each priority has between one and seven targets, and a single target can have as many as 11 separate indicators. The indicators must first be combined to get an overall sense of how NC fares on the performance criteria that comprise the target. Because the targets are of necessity expressed in different terms, it was necessary to use a method that would allow different types of targets to be combined, first to the level of priorities and then to the level of goals.

GENERAL APPROACH

The general approach used to combine the indicators to the level of targets was to express NC's current performance as a percentage of the overall target. For targets where the objective was to be in the top ten states among all fifty states and DC, the 10th state's score was the denominator and the performance score for NC was the numerator. For the cases with fewer than fifty states reporting, the value to be indexed against should be the state or states at the equivalent of the 10th state (10/51). For instance, if 24 states reported, the state representing the goal would be the fifth state. For the other frequently used objective, 9 out of 10 agree with a series of statements, 90 was the denominator and the NC score (in percentage terms) was used as the numerator. All other objectives were set using a parallel method, that is, taking the NC score as the numerator and the objective as denominator.

COMBINING THE INDICATOR RESULTS

To combine the indicators to the level of targets, each indicator was given equal weight and the scores were averaged. Targets were then averaged, giving each target an equal weight for the priority "grade equivalent." To aggregate to the goal level, the process was repeated for each priority beneath a particular goal, again with each priority receiving equal weight.

Appendix B: First in America Survey Methodology

SURVEY OF TEACHERS

The sample of 1,797 teachers was drawn by staff at the Applied Research Center based on records provided by the North Carolina Education Research Council. During the first week of April, 2000, letters were mailed to all sample members at their school's address. The letter provided a brief explanation of the research project and it's purpose, asked that the respondent help in the research effort by completing the survey when they received it, and included a postage-paid postcard where the respondent could provide the Center with an alternate address to which the survey should be mailed.

One week after the mailing of the notification letter, surveys were mailed to all sample members. The mailing included a copy of the survey, a postage-paid return envelope with a unique respondent identification number written on the outside, and a copy of the "NC Schools *First in America*, 2010" promotional poster. Return envelopes were addressed to the North Carolina Education Research Council. When surveys were received by the Research Council, the identification number was logged in, and these numbers were forwarded to the Applied Research Center regularly. Identification numbers that had been logged in were removed from the mailing list for subsequent mailouts.

Approximately one week following the initial mailing, a second copy of the survey and postage-paid return envelope were sent to those respondents who had not yet completed and returned their survey. The same logging-in procedure continued for this mailing.

All completed surveys were sent to the Applied Research Center via Federal Express by staff at the North Carolina Education Research Council. Staff at the Applied Research Center removed the surveys from the envelopes, ensuring that no survey form could be traced back to an individual respondent. Surveys were scanned upon receipt and the data maintained by staff of the Applied Research Center.

A total of 917 completed surveys were received from the 1,788 teachers for whom we had a valid address for a response rate of 51.3%. Ten additional teacher surveys were received after the tables included in this report had been completed. At the 95% confidence level, the maximum margin of error for the survey of teachers was ±3.2 percentage points.

SURVEY OF PRINCIPALS

The sample of 663 principals was drawn by staff at the Applied Research Center based on records provided by the North Carolina Education Research Council. During the first week of April, 2000, letters were mailed to all sample members at their school's address. The letter provided a brief explanation of the research project and it's purpose, asked that the respondent help in the research effort by completing the survey when they received it, and included a postage-paid postcard where the respondent could provide the Center with an alternate address to which the survey should be mailed.

One week after the mailing of the notification letter, surveys were mailed to all sample members. The mailing included a copy of the survey, a postage-paid return envelope with a unique respondent identification number written on the outside, and a copy of the "NC Schools *First in America*, 2010" promotional poster. Return envelopes were addressed to the North Carolina Education Research Council. When surveys were received by the Research Council, the identification number was logged in, and these numbers were forwarded to the Applied Research Center regularly. Identification numbers that had been logged in were removed from the mailing list for subsequent mailouts.

Approximately one week following the initial mailing, a second copy of the survey and postage-paid return envelope were sent to those respondents who had not yet completed and returned their survey. The same logging-in procedure continued for this mailing.

All completed surveys were sent to the Applied Research Center via Federal Express by staff at the North Carolina Education Research Council. Staff at the Applied Research Center removed the surveys from the envelopes, ensuring that no survey form could be traced back to an individual respondent. Surveys were scanned upon receipt and the data maintained by staff of the Applied Research Center.

A total of 395 completed surveys were received from the 660 principals for whom we had a valid address for a

response rate of 59.8%. Six additional principal surveys were received after the tables included in this report had been completed. At the 95% confidence level, the maximum margin of error for the survey of principals was ±4.9 percentage points.

GENERAL POPULATION SURVEY

The sample for the survey of the general public that is part of the larger First in American 2000 project is a random digit dial sample of adults 18 and over who reside in household in the state of North Carolina. We began with a list that contained 5,118 telephone numbers generated by computer. The telephone numbers were provided by Survey Sampling Inc. From this list we eliminated all business and disconnected numbers. In addition, we eliminated all households without an adult at least 18 years old. Table 1 gives the distribution of nonsample and eligible sample units.

Table 1: Description of Sample Units

SAMPLE TYPE	TOTAL	PERCENT
Eligible Sample	3384	66.1
Nonsample	1734	
No Adult 18 or Over	20	0.4
Business	426	8.3
Disconnected or Nonworking Number	1288	25.2
TOTAL	5118	100.0

The study period began on May 14, 2000 and continued until July 17, 2000. Interviewing was conducted on weekdays from 10 am to 9 pm, Monday through Thursday and on Fridays from 10 am to 5 pm. Weekend interviewing took place on Saturdays from 11 am to 7 pm and on Sundays from 1 pm to 9 pm.

A random respondent was chosen from each household by asking to speak with the person 18 years of age or older living in that household who had the most recent birthday. This person became the qualified respondent and only this person could complete the survey.

On average, 8.3 calls were made to each of the 3384 eligible telephone numbers, and the average length of the interview was 9.47 minutes. Table 2 lists the sample statistics for the eligible households. In addition an average of 3 calls was made to each nonsample number. Of the households in which someone refused, we were able to obtain interviews from 330 (19.3%) using refusal conversion methods.

Table 2: Survey Outcomes for the Eligible Sample

OUTCOME	NUMBER	PERCENT	AVERAGE NUMBER OF CALLS
Completed Interviews	1317	38.9	4.7
Refusals by Respondent or Someone Else in Household	1180	34.9	10.0
Noninterviews (Sickness, Doesn't Speak English, Out of Town, Respondent Unavailable)	787	23.3	12.3
Noncontacts (All Calls Are Ring No Answer, Busy, and Answering Machines)	99	2.9	3.6
TOTAL	3384	100.0	8.3

The information gathered for this cross section of the general population of adults must be weighted. The weight adjusts the distribution of the respondents by age, gender, and race so that it mirrors the statewide distributions on these variables as determined by the 1990 U.S. Census.

Many of the questions were not asked in exactly the same way of parents and nonparents. Therefore, the data are presented for the full cross-section of 1,317 respondents when the questions are identically worded. However, when the question wording differs for parents and nonparents, only the data for nonparents are tabulated and the weights

are not used. There were 892 respondents who did not have a school-age child at the time of the interview. Of the 425 respondents with school-age children in the cross-section, 40 provided data only for the questions asked of all respondents. They did not answer the questions relevant only to parents or answered just a few of them. These 40 respondents were excluded from the parent data file. All parent tabulations are based on the full file of 539 parents.

SAMPLE OF PARENTS

To obtain additional parent interviews, 2,024 new numbers were added to the sample for the cross-section. Tables 3 and 4 describe the final outcomes of these numbers.

Table 3: Description of Supplemental Sample of Parents

SAMPLE TYPE	NUMBER	PERCENT
Eligible Sample	390	19.3
Nonsample	1634	
Disconnected and Business Numbers	668	33.0
No Eligible Respondent (Nonparents)	966	47.7
TOTAL	2024	100.0

Table 4: Survey Outcomes for Supplemental Sample of Parents

OUTCOME	NUMBER	PERCENT
Completed Interviews	154	39.5
Noninterviews Including Refusals, Sickness, and Noncontacts	236	60.5
TOTAL	390	100.0

The study period for the parent sample was extended approximately a month to August 16, 2000. Interviewing took place on the same days and at the same hours as for the survey of the general population.

The final parent data file contains 385 respondents from the original survey of the general population of adults plus the 154 respondents from the supplement for a total of 539. At the 95% confidence level, the maximum margin of error for the survey of parents was ±4.2 percentage points.

Overall 46,494 calls were made to the 7,142 telephone numbers that make up the combined samples for an average of 6.5 calls per number.

30,000 copies of this document (report card, data report, envelope, and progress report) were printed at a cost of $48,807.00, $1.63 per copy.

NC SCHOOLS

FIRST IN AMERICA

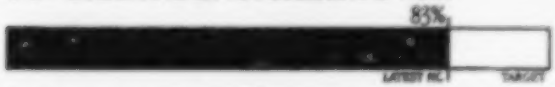
2 0 1 0

A Goal for North Carolina's Schools
2000 Report Card

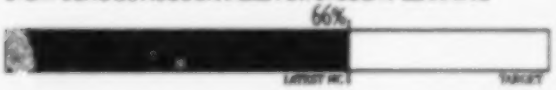
C HIGH STUDENT PERFORMANCE

EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS

EVERY GRADUATE READY FOR COLLEGE AND WORK

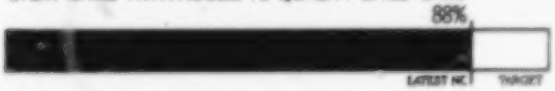


EVERY SCHOOL ACCOUNTABLE FOR STUDENT LEARNING

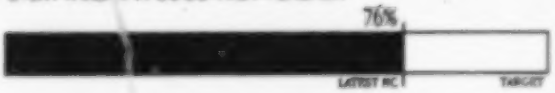


B- EVERY CHILD READY TO LEARN

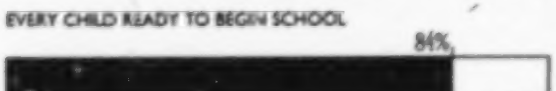
EVERY CHILD WITH ACCESS TO QUALITY CHILD CARE



EVERY PARENT A GOOD FIRST TEACHER

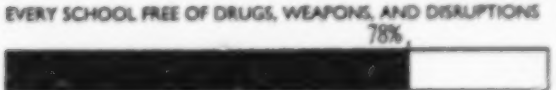


EVERY CHILD READY TO BEGIN SCHOOL

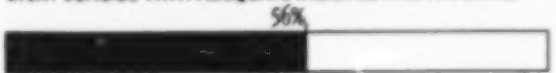


C+ SAFE, ORDERLY, AND CARING SCHOOLS

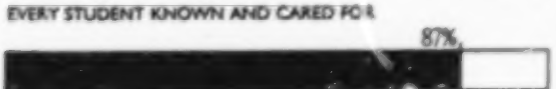
EVERY SCHOOL FREE OF DRUGS, WEAPONS, AND DISRUPTIONS



EVERY SCHOOL WITH ADEQUATE FACILITIES AND MATERIALS



EVERY STUDENT KNOWN AND CARED FOR

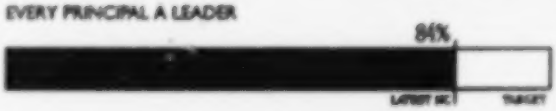


EVERY FAMILY WELCOMED

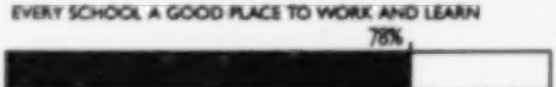
QUALITY TEACHERS AND ADMINISTRATORS B-

EVERY TEACHER COMPETENT, CARING, AND QUALIFIED

EVERY PRINCIPAL A LEADER

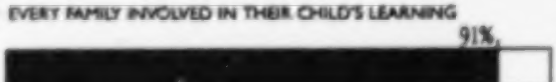


EVERY SCHOOL A GOOD PLACE TO WORK AND LEARN

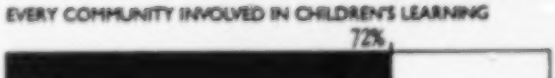


STRONG FAMILY, BUSINESS, AND COMMUNITY SUPPORT B-

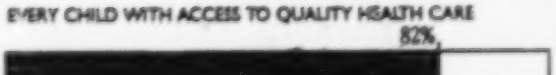
EVERY FAMILY INVOLVED IN THEIR CHILD'S LEARNING



EVERY COMMUNITY INVOLVED IN CHILDREN'S LEARNING



EVERY CHILD WITH ACCESS TO QUALITY HEALTH CARE



FOR MORE INFORMATION

Information for the *First in America* Reports is derived from multiple national and state sources. The complete list of *State Sources and Notes* is available in the *First in America 2000 Progress Report* and on the *First in America* website — http://www.firstamerica.northcarolina.edu

A copy of the *First in America Reports* may also be requested by phone 919-843-6783, by email fia@ga.unc.edu, or by mail:

North Carolina Education Research Council
Post Office Box 2688
Chapel Hill, North Carolina 27515-2688

LEGEND

Latest NC: This is the average score for North Carolina taken from the most recent data collection available. Most recent data collection dates range from 1998 to 2000.

Target: This is the score North Carolina currently needs to achieve to reach the First in America target.

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NC SCHOOLS

FIRST IN AMERICA 2010

A Goal for North Carolina's Schools 2000 Data Report

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First in America Goals

High Student Performance
- Every Student in School and Making Strong Progress
- Every Graduate Ready for College and Work
- Every School Accountable for Student Learning

Every Child Ready to Learn
- Every Child with Access to Quality Child Care
- Every Parent a Good First Teacher
- Every Child Ready to Begin School

Safe, Orderly, and Caring Schools
- Every School Free of Drugs, Weapons, and Disruption
- Every School with Adequate Facilities and Materials
- Every Student Known and Cared for
- Every Family Welcomed

Quality Teachers and Administrators
- Every Teacher Competent, Caring, and Qualified
- Every Principal a Leader
- Every School a Good Place to Work and Learn

Strong Family, Business, and Community Support
- Every Family Involved in Their Child's Learning
- Every Community Involved in Children's Learning
- Every Child with Access to Quality Health Care

"Let's commit ourselves to this ambitious goal:
By the year 2010, North Carolina will build the best system of public schools of any state in America.
By the end of the first decade of the 21st Century, we will be the first in education."

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HIGH STUDENT PERFORMANCE

TARGETS | INDICATORS | SCORES, CHANGE, AND RANK

Change: ⇧ North Carolina's score was significantly better. / ⇩ North Carolina's score was significantly worse. / ⇔ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY STUDENT IN SCHOOL AND MAKING STRONG PROGRESS

- NC will be one of the top 10 states on National Assessment of Educational Progress (NAEP) assessments.

Percentage of students scoring proficient or higher on NAEP assessments

GRADE 4 READING:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
28%	30%	⇔	Tied for 22nd	31%	34%	46%(CT)

GRADE 4 MATH:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
21%	13%	⇧	Tied for 18th	21%	24%	31%(CT)

GRADE 8 READING:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
31%	N/A	N/A	Tied for 12th	31%	34%	42%(CT,ME)

GRADE 8 WRITING:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
27%	N/A	N/A	Tied for 6th	27%	27%	44%(CT)

GRADE 8 MATH:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
20%	12%	⇧	Tied for 24th	24%	31%	34%(MN)

GRADE 8 SCIENCE:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
24%	N/A	N/A	24th	29%	36%	41%(ME,MT,ND)

- Nine out of 10 NC students will score at or above grade level on End-of-Grade (EOG) and End-of-Course (EOC) examinations.

Percentage of students scoring at or above grade level on NC's EOG and EOC examinations

NC EOG: % OF STUDENTS IN GRADES 3-8 SCORING AT OR ABOVE LEVEL III / CHANGE (PRIOR NC SCORE IN PARENTHESES)

Reading	Mathematics	Both
75% (75%)⇔	80% (79%)⇧	70% (69%)⇧

NC EOC: % SCORING AT OR ABOVE LEVEL III / CHANGE (PRIOR NC SCORE IN PARENTHESES)

Algebra I:	Algebra II:	Geometry:	Physical Science:	Biology:
69% (65%)⇧	63% (59%)⇧	60% (58%)⇧	57% (56%)⇧	58% (58%)⇔
Chemistry:	**Physics:**	**ELPS:**	**English I:**	**US History:**
62% (60%)⇧	73% (72%)⇧	67% (67%)⇔	68% (65%)⇧	47% (51%)⇩

- NC will eliminate the minority achievement gap.

Gap in percent proficient on NAEP and percent at or above grade level on NC EOG and EOC examinations

	BLACK/WHITE GAP	HISPANIC/WHITE GAP	AMERICAN INDIAN/WHITE GAP (IN PERCENTAGE POINTS)
NAEP	28	24	21
EOG & EOC	27	18	14

- NC will be 1st in the nation in the percentage of students taking advanced courses.

Percentage of students taking advanced courses in math and science

% OF 8TH GRADERS TAKING ALGEBRA:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
27%	30%	⇩	Tied for 4th	18%	54%	54%(UT)

% OF HIGH SCHOOL STUDENTS TAKING UPPER LEVEL MATH COURSES:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
59%	59%	⇔	Tied for 2nd	45%	61%	61%(NE)

% OF HIGH SCHOOL STUDENTS TAKING UPPER LEVEL SCIENCE COURSES:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
31%	30%	⇧	Tied for 10th	26%	41%	41%(MS)

- 95 percent of NC's students will finish high school.

Percentage of students completing high school or GED

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
85%	87%	⇔	Tied for 36th	85%	95%	95%(MD,ND)

- NC will be one of the top 10 states in program completion rates for exceptional students.

Percentage of exceptional students age 14 or older who successfully complete their special education program

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
48%	48%	⇔	Tied for 17th	46%	53%	84%(TX)

• NC will be among the 10 states with the lowest high school dropout rate.	Percentage of teens age 16 to 19 who are high school dropouts *	LATEST NC SCORE: 12%	PRIOR NC SCORE: 12%	CHANGE: ⇔	NC RANK: Tied for 41st	US AVERAGE: 10%	TARGET SCORE: 7%	FIRST: 4%(WI)

EVERY GRADUATE READY FOR COLLEGE AND WORK

• Nine out of 10 NC students will pass a tough high school exit exam.	Percentage of students passing an exit examination	*Available Spring 2003.*						
• NC will be one of the top 10 states in SAT scores.	Average SAT scores and adjusted SAT scores for NC students	AVERAGE SAT SCORES:						
		LATEST NC SCORE: 988	PRIOR NC SCORE: 986	CHANGE: ⇧	NC RANK: 48th	US AVERAGE: 1019	TARGET SCORE: 1131	FIRST: 1197(ND)
		SAT SCORES ADJUSTED FOR PARTICIPATION RATES:						
		LATEST NC SCORE: 1029	PRIOR NC SCORE: 1025	CHANGE: ⇧	NC RANK: 38th	US AVERAGE: 1053	TARGET SCORE: 1088	FIRST: 1114(ND)
• NC will be among the top 5 states in the number of Advanced Placement (AP) exams scored at or above level 3.	Number of AP exams scored at or above level 3 for every 1,000 11th and 12th graders	LATEST NC SCORE: 135	PRIOR NC SCORE: 104	CHANGE: ⇧	NC RANK: 10th	US AVERAGE: 113	TARGET SCORE: 182	FIRST: 304(DC)
• NC will be one of the top 10 states in the percentage of students attending college.	Percentage of students enrolled in two- and four-year programs of higher education	LATEST NC SCORE: 54%	PRIOR NC SCORE: 49%	CHANGE: ⇧	NC RANK: Tied for 33rd	US AVERAGE: N/A	TARGET SCORE: 62%	FIRST: 73%(MA)
• Nine out of 10 NC students who complete a vocational course of study will be highly rated by their employer.	Percentage of vocational graduates ranked above average when compared to other new employees	LATEST NC SCORE: 71%	PRIOR NC SCORE: 70%	CHANGE: ⇧				

EVERY SCHOOL ACCOUNTABLE FOR STUDENT LEARNING

• NC's system of standards, assessments, and accountability will be consistently ranked among the best in the nation.	External evaluations of standards, assessments, and accountability systems	LATEST NC SCORE: A / 95%	PRIOR NC SCORE: B+/ 89%	CHANGE: ⇧	NC RANK: 4th	US AVERAGE: N/A	TARGET SCORE: A-/ 91%	FIRST: A / 100%(NM)
		(*Education Week* evaluates standards, assessments, and accountability systems.)						
		LATEST NC SCORE: B- / 2.8GPA	PRIOR NC SCORE: C / 2.0GPA	CHANGE: ⇧	NC RANK: Tied for 5th	US AVERAGE: C- /1.72GPA	TARGET SCORE: C+ / 2.5 GPA	FIRST: A-/3.6GPA(CA)
		(Fordham Foundation ratings are based on an assessment of state standards.)						

• Nine of 10 NC schools will be recognized as Schools of Excellence or Schools of Distinction by the ABCs program.	Number and percentage of schools receiving each ABCs designation	LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:
	SCHOOLS OF EXCELLENCE	73 (4%)	50 (3%)	⇧
	SCHOOLS OF DISTINCTION	510 (24%)	408 (21%)	⇧
	LOW PERFORMING SCHOOLS*	95 (2%)	13 (.7%)	⇩

FOR MORE INFORMATON

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North Carolina Education Research Council
Post Office Box 2688
Chapel Hill, North Carolina 27515-2688

LEGEND

* *On this indicator a lower score is better, a higher score is worse.*

Latest NC Score: *This is the average score for North Carolina taken from the most recent data collection available. Most recent data collection dates range from 1990 to 2000.*

Prior NC Score: *This is the average score for North Carolina taken from the preceding data collection.*

Change: *Change arrows show North Carolina's progress from the last data collection to the most recent data collection.*

- ⇧ *North Carolina's score is significantly better.*
- ⇩ *North Carolina's score is significantly worse.*
- ⇔ *Interpret North Carolina's score with caution — change is not significant.*

NC Rank: *North Carolina's rank among states for which data are available. States are ranked from best to worst.*

U.S. Average: *This is the average score for the United States taken from the most recent data collection available.*

Target Score: *This is the score North Carolina currently needs to achieve to reach the First in America target.*

First: *The score and state abbreviation is listed for the state receiving the best reported score.*

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EVERY CHILD READY TO LEARN

TARGETS | INDICATORS | SCORES, CHANGE, AND RANK

Changes: ⬆ North Carolina's score was significantly better. / ⬇ North Carolina's score was significantly worse. / ⬌ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY CHILD WITH ACCESS TO QUALITY CHILD CARE

- NC will provide high quality child care, encourage family support for children's learning, and facilitate access to health resources for all children.

Smart Start indicators (19 Pioneer Counties)

Child care improvements

CHILD-TO-TEACHER RATIOS:*

	LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:
INFANTS	4-TO-1	4-TO-1	⬌
TODDLERS	6-TO-1	6-TO-1	⬌
PRE-SCHOOLERS	9-TO-1	9-TO-1	⬌

CHILD CARE TEACHERS WITH SOME COLLEGE OR COMMUNITY COLLEGE COURSEWORK:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:
77%	59%	⬆

Family support for children's learning

% OF FAMILIES WHO ENGAGED IN EDUCATIONALLY IMPORTANT ACTIVITIES WITH THEIR CHILD:

	LATEST NC SCORE:	US AVERAGE:
READ TO A CHILD	91%	90%
TOLD A STORY	79%	75%
TAUGHT LETTERS, WORDS, NUMBERS	82%	88%

Health resources provided

% OF CHILD CARE CENTERS PROVIDING HEALTH SCREENINGS:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:
74%	59%	⬆

Child care worker average salary

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
$6.77/hr	$6.69/hr	⬆	Tied for 26th	$7.13/hr	$7.56/hr	$9.95 (DC)

Ratings of child care programs in NC

% OF LICENSED DAY CARE CENTERS RECEIVING EACH STAR RATING:

☆☆ 5% ☆☆☆ 59% ☆☆☆☆ 24% ☆☆☆☆☆ 11% TOTAL AT 3-5 STARS: 94%

EVERY PARENT A GOOD FIRST TEACHER

- NC will be one of the nation's top 10 states in adult literacy and home support for literacy.

Adult literacy rate

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
50%	N/A	N/A	Tied for 39th	56%	68%	76% (AK)

Home environment support for literacy

% OF 4TH GRADERS REPORTING PRESENCE OF LITERACY MATERIALS AT HOME:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
72%	72%	⬌	Tied for 22nd	N/A	76%	80% (CT)

% OF 8TH GRADERS REPORTING PRESENCE OF LITERACY MATERIALS AT HOME:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
81%	81%	⬌	Tied for 18th	N/A	83%	86% (CT)

% OF 4TH GRADERS SPENDING 5 OR MORE HOURS WATCHING TV DAILY:*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
28%	29%	⬌	Tied for 30th	25%	17%	14% (MN,UT)

% OF 8TH GRADERS SPENDING 5 OR MORE HOURS WATCHING TV DAILY:*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
24%	29%	⬆	Tied for 23rd	23%	14%	8% (UT)

EVERY CHILD READY TO BEGIN SCHOOL

- NC kindergartners will arrive ready to succeed in school and NC schools will be ready to meet their needs.

NC kindergartners' readiness scores

	LATEST NC SCORE:	US AVERAGE/TARGET SCORE:
HEALTH STATUS	84%	83%
SOCIAL DEVELOPMENT	99	100
APPROACHES TOWARD LEARNING	82%	83%
LANGUAGE DEVELOPMENT	97	100
MATH DEVELOPMENT	96	100

NC schools' readiness for kindergartners

	LATEST NC SCORE:	TARGET SCORE:
AVERAGE KINDERGARTEN CLASS SIZE*	21	18
KINDERGARTEN TEACHERS WITH EARLY CHILDHOOD LICENSURE	9%	90%

SAFE, ORDERLY, AND CARING SCHOOLS

TARGETS | **INDICATORS** | **SCORES, CHANGE, AND RANK**

Changes: ⬆ North Carolina's score was significantly better. / ⬇ North Carolina's score was significantly worse. / ⬌ Interpret North Carolina's score with caution — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY SCHOOL FREE OF DRUGS, WEAPONS, AND DISRUPTION

- NC will be among the top 5 states in freedom from drugs, weapons, violence, and teacher victimization by students.

Incidence of drugs, weapons, and violence in NC's schools*

% OF STUDENTS OFFERED, SOLD, OR GIVEN AN ILLEGAL DRUG ON SCHOOL PROPERTY LAST YEAR:*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
30%	29%	⬌	Tied for 9th	32%	24%	20% (MS)

% OF STUDENTS CARRYING A WEAPON ON SCHOOL PROPERTY DURING THE LAST 30 DAYS:*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
9%	14%	⬆	Tied for 3rd	10%	8%	8% (HI, MS)

% OF STUDENTS THREATENED OR INJURED AT SCHOOL DURING THE LAST YEAR:*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
8%	10%	⬌	Tied for 11th	8%	6%	5% (HI)

% OF STUDENTS INVOLVED IN A PHYSICAL FIGHT ON SCHOOL PROPERTY DURING THE LAST YEAR:*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
12%	15%	⬌	Tied for 1st	16%	12%	12% (NC, ND)

% OF TEACHERS WHO REPORT BEING THREATENED OR ATTACKED IN THEIR SCHOOL:*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
19%	N/A	N/A	Tied for 45th	15%	9%	8% (ND, SD)

EVERY SCHOOL WITH ADEQUATE FACILITIES AND MATERIALS

- Nine of 10 NC teachers will report that facilities, equipment, and materials are adequate for instructional purposes.

Percentage of teachers reporting that facilities, equipment, and materials are adequate for instructional purposes

LATEST NC SCORE:
40%

- NC schools will rank among the top 10 states in access to technology.

Students per Internet-connected computer*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
25	N/A	N/A	Tied for 48th	14	10	6 (AK, DE)

Percentage of schools where at least half of teachers use a computer daily for planning and or teaching

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
72%	N/A	N/A	Tied for 22nd	69%	77%	92% (AK)

EVERY STUDENT KNOWN AND CARED FOR

- NC will be among the top 10 states in reducing class size and chronic absenteeism.

Percentage of 4th and 8th graders in classes of 25 or fewer

GRADE 4:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
63%	59%	⬆	26th	64%	90%	98% (ME)

GRADE 8:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
69%	52%	⬆	20th	57%	76%	92% (ME)

Percentage of 8th graders missing 3 or more days of school during the last month*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
22%	20%	⬌	Tied for 9th	22%	21%	19% (AL, TX, WI)

- Nine of 10 parents will say that their child is known and cared about as an individual in school.

Percentage of parents who report that their child is known and cared about as an individual by his/her teachers and principal

LATEST NC SCORE:
79%

EVERY FAMILY WELCOMED

- Nine of 10 families will say they feel welcomed and encouraged to participate in their children's schools.

Percentage of families who feel welcomed and encouraged to participate in their child's school

LATEST NC SCORE:
80%

4 QUALITY TEACHERS AND ADMINISTRATORS

TARGETS | INDICATORS | SCORES, CHANGE, AND RANK

Change: ⇧ North Carolina's rank, rate or performance improved. / ⇩ North Carolina's rank, rate or performance declined. / ⇔ Between North Carolina's most recent and previous scores — change was not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY TEACHER COMPETENT, CARING, AND QUALIFIED

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK
• NC teachers will score at or above the national average on teacher examinations.	Average examination scores of NC teachers	PRAXIS CONTENT KNOWLEDGE EXAMINATIONS: LATEST NC SCORE: 167 · PRIOR NC SCORE: N/A · CHANGE: N/A · US AVERAGE: 167
		PRAXIS PRINCIPLES OF LEARNING AND TEACHING EXAMINATION:
		LATEST NC SCORE: · PRIOR NC SCORE: · CHANGE: · US AVERAGE:
		GRADES K-6: 174 · 171 · ⇧ · 173
		GRADES 5-9: 172 · 174 · ⇩ · 172
		GRADES 7-12: 175 · 174 · ⇧ · 174
• NC will be among the top 10 states in the percentage of teachers who are fully licensed.	Percentage of teachers meeting licensure requirements	LATEST NC SCORE: 93% · PRIOR NC SCORE: 79% · CHANGE: ⇧ · NC RANK: Tied for 26th · US AVERAGE: 92% · TARGET SCORE: 96% · FIRST: 99% (KS, WY)
• NC will be one of the top 10 states in the percentage of teachers teaching in their field.	Percentage of secondary teachers teaching in the field in which they are licensed	LATEST NC SCORE: 66% · PRIOR NC SCORE: 68% · CHANGE: ⇔ · NC RANK: Tied for 22nd · US AVERAGE: 63% · TARGET SCORE: 72% · FIRST: 81% (MN)
• Nine of 10 NC teachers will engage in high quality professional development.	Percentage of teachers who report that they have participated in high quality professional development	LATEST NC SCORE: 56%
• NC will continue to lead the nation in the number of National Board Certified Teachers.	Number of teachers attaining National Board Certification	LATEST NC SCORE: 1262 · PRIOR NC SCORE: 536 · CHANGE: ⇧ · NC RANK: 1st · US AVERAGE: N/A · TARGET SCORE: 1262 · FIRST: 1262 (NC)
• NC will be one of the top 10 states in the percentage of teachers with master's degrees.	Percentage of teachers with master's degrees	LATEST NC SCORE: 36% · PRIOR NC SCORE: 37% · CHANGE: ⇔ · NC RANK: 40th · US AVERAGE: 47% · TARGET SCORE: 56% · FIRST: 80% (CT)
• 95 percent of NC teachers will remain in the teaching profession from one year to the next.	Percentage of teachers who remain in the teaching profession	LATEST NC SCORE: 87% · PRIOR NC SCORE: 88% · CHANGE: ⇩

EVERY PRINCIPAL A LEADER

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK
• NC principals will score at or above the national average on principal examinations.	Average examination scores of NC principals	SCHOOL LEADERS LICENSURE ASSESSMENT: LATEST NC SCORE: 177 · PRIOR NC SCORE: 156 · CHANGE: ⇧ · US AVERAGE: 173
• Nine of 10 teachers and parents will agree that their principal demonstrates characteristics of effective leadership.	Teacher and parent perceptions of their principal's leadership	LATEST NC SCORE: · TEACHERS: 48% · PARENTS: 74%

EVERY SCHOOL A GOOD PLACE TO WORK AND LEARN

TARGETS	INDICATORS	SCORES, CHANGE, AND RANK
• Nine of 10 teachers and administrators will say that their school is a good place to work and learn.	Teacher and administrator perceptions of their work environment	LATEST NC SCORE: · TEACHERS: 38% · PRINCIPALS: 57%
• NC schools will rank among the top 10 states in the percentage of the annual education expenditures allocated to instruction.	Percentage of annual education expenditures allocated to instruction	LATEST NC SCORE: 63% · PRIOR NC SCORE: 62% · CHANGE: ⇔ · NC RANK: Tied for 12th · US AVERAGE: 62% · TARGET SCORE: 64% · FIRST: 68% (NY)

		LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
compensation.		$39,220	$36,098	⇧	23rd	$41,179	$47,041	$52,174

STRONG FAMILY, BUSINESS, AND COMMUNITY SUPPORT

TARGETS | INDICATORS | SCORES, CHANGE, AND RANK

Change: ⇧ North Carolina's score can significantly better. / ⇩ North Carolina's score can significantly worse. / ⇔ Interpret North Carolina's score with caution — change can not significant. / * On this indicator a lower score is better, a higher score is worse.

EVERY FAMILY INVOLVED IN THEIR CHILD'S LEARNING

- Nine of 10 NC teachers will engage in activities that promote parental involvement.

  Percentage of teachers who actively promote parental involvement

	LATEST NC SCORE:
OFFERING OPPORTUNITIES FOR PARENTS TO VOLUNTEER	90%
COMMUNICATING WITH PARENTS	70%

- Nine of 10 parents will take steps to support their child's learning.

  Percentage of parents who actively support their child's learning at school and at home

	LATEST NC SCORE:
PARENTAL INVOLVEMENT IN THEIR CHILD'S SCHOOL	64%
PARENTAL SUPPORT FOR THEIR CHILD'S LEARNING AT HOME	90%

- NC will be one of the nation's top 10 states in family support for homework.

  Percentage of students who discuss their studies at home daily

  % OF 4TH GRADERS REPORTING THEY DISCUSSED STUDIES AT HOME DAILY:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
56%	59%	⇔	Tied for 12th	54%	57%	65% (DC)

  % OF 8TH GRADERS REPORTING THEY DISCUSSED STUDIES AT HOME DAILY:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
40%	43%	⇔	Tied for 2nd	34%	39%	46% (DC)

EVERY COMMUNITY INVOLVED IN CHILDREN'S LEARNING

- Nine out of 10 parents will report that their employers offer opportunities for school involvement.

  Percentage of parents who report that their employer offers opportunities for school involvement

LATEST NC SCORE:
40%

- 40,000 mentors will be supporting children's learning in NC.

  Number of people serving as mentors

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:
40,000+	21,500	⇧

EVERY CHILD WITH ACCESS TO QUALITY HEALTH CARE

- NC will be one of the top 10 states in child health and well-being.

  94% (67,231 of 71,646) of eligible children without health insurance are currently enrolled in North Carolina's Children's Health Insurance Program.

  Child health indicators

  % OF INFANTS AT RISK FOR POOR HEALTH:*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
36%	38%	⇧	Tied for 26th	33%	30%	24% (CT)

  Access to health care

  % OF 2-YEAR OLD CHILDREN WITH IMMUNIZATIONS:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
82%	84%	⇔	Tied for 20th	80%	85%	91% (VT)

  % OF CHILDREN WITH HEALTH INSURANCE:

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
88%	87%	⇔	26th	86%	91%	95% (MO)

  Child health behaviors

  % OF CHILDREN 12-17 HAVING 5 OR MORE ALCOHOLIC DRINKS IN A ROW DURING THE LAST MONTH:*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
9%	N/A	N/A	Tied for 7th	11%	9%	8%

  % OF CHILDREN 12-17 USING MARIJUANA IN THE LAST MONTH:*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
7%	N/A	N/A	Tied for 10th	8%	7%	5% (WI)

  % OF CHILDREN 12-17 WHO CURRENTLY USE CIGARETTES:*

LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:	NC RANK:	US AVERAGE:	TARGET SCORE:	FIRST:
19%	N/A	N/A	Tied for 41st	15%	14%	9% (CA)

  Support for children's nutrition

	LATEST NC SCORE:	PRIOR NC SCORE:	CHANGE:
FREE AND REDUCED MEAL PARTICIPATION	99%	99%	⇔
SUMMER FOOD PROGRAM PARTICIPATION	9%	10%	⇩